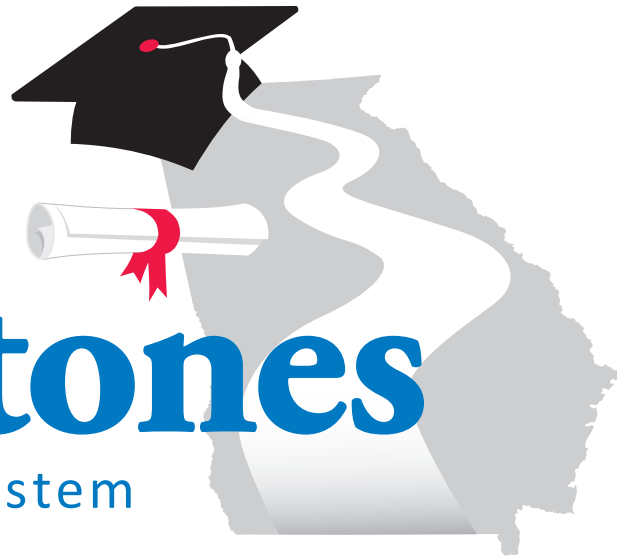


Georgia Milestones

Assessment System



Study/Resource Guide for Students and Parents

Grade 4



The Study/Resource Guides are intended to serve as a resource for parents and students. They contain practice questions and learning activities for each content area. The standards identified in the Study/Resource Guides address a sampling of the state-mandated content standards.

For the purposes of day-to-day classroom instruction, teachers should consult the wide array of resources that can be found at www.georgiastandards.org.

Study/Resource Guide

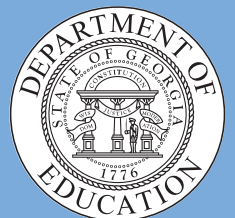


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THE GEORGIA MILESTONES ASSESSMENT SYSTEM



Dear Student,

This **Georgia Milestones Grade 4 Study/Resource Guide for Students and Parents** is intended as a resource for parents and students. It contains sample questions and helpful activities to give you an idea of what test questions look like on Georgia Milestones and what the Grade 4 End-of-Grade (EOG) assessment covers.

These sample questions are fully explained and will tell you why each answer is either correct or incorrect.

Get ready—open this guide—and get started!

HOW TO USE THIS GUIDE

Let's get started!

* **Get it together!**

- This guide
- Pen or pencil
- Highlighter
- Paper



* **Gather materials**

- Classroom notebooks
- Textbooks

* **Study space**

- Find a comfortable place to sit.
- Use good lighting.
- Time to focus—no TV, games, or phones!

* **Study time**

- Set aside some time after school.
- Set a goal—how long are you going to study?
- Remember—you cannot do this all at one time.
- Study a little at a time every day.

* **Study buddy**

- Work with a friend, sister, brother, parent—anyone who can help!
- Ask questions—it is better to ask now and get answers.
- Make sure you know what you need to do—read the directions before you start.
- Ask your teacher if you need help.

* **Test-taking help**

- Read each question and all of the answer choices carefully.
- Be neat—use scratch paper.
- Check your work!

PREPARING FOR TAKING TESTS

Getting ready!



Here are some ideas to think about before you take a test.

- Get plenty of rest and eat right. Take care of your body and your mind will do the rest.
- If you are worried about a test, don't be. Talk with a teacher, parent, or friend about what is expected of you.
- Review the things you have learned all year long. Feel good about it.
- Remember that a test is just one look at what you know. Your class work, projects, and other tests will also show your teachers how much you have learned throughout the year.

Try your best!

OVERVIEW OF THE END-OF-GRADE ASSESSMENT

What is on the End-of-Grade Assessment?

- * English Language Arts (ELA)
- * Mathematics
- * Science
- * Social Studies

TYPES OF ITEMS

- * **Selected-response items**—also called multiple-choice items
 - English Language Arts (ELA), Mathematics, Science, and Social Studies
 - There is a question, problem, or statement that is followed by four answer choices.
 - There is only ONE right answer, so read EACH answer choice carefully.
 - Start by eliminating the answers that you know are wrong.
 - Then look for the answer that is the BEST choice.
- * **Constructed-response items**
 - English Language Arts (ELA) and Mathematics only
 - There is a question, problem, or statement but no answer choices.
 - You have to write your answer or work out a problem.
 - Read the question carefully and think about what you are asked to do.
 - In English Language Arts (ELA), go back to the passage to look for details and information.
 - You will be scored on accuracy and how well you support your answer with evidence.
- * **Extended constructed-response items**
 - English Language Arts (ELA) and Mathematics only
 - These are similar to the constructed-response items.
 - Sometimes they have more than one part, or they require a longer answer.
 - Check that you have answered all parts of the question.
- * **Extended writing prompt**
 - English Language Arts (ELA) only
 - There is a question, problem, or statement.
 - You may be asked to do more than one thing.
 - In English Language Arts (ELA), you will be asked to read two passages and then write an essay.
 - You will be scored on how well you answer the question and the quality of your writing.
 - Organize your ideas clearly.
 - Use correct grammar, punctuation, and spelling.
 - Support your answer with evidence from the text.

DEPTH OF KNOWLEDGE

Test questions are designed with a Depth of Knowledge (DOK) level in mind. As you go from Level 1 to Level 4, the items get more and more challenging. They take more thinking and reasoning to answer. You may have experienced these types of questions in your classroom as your teachers find ways to challenge you each day.

A Level 1 item may not require as much thinking as a Level 4 item—but that does not mean it's easy.

A Level 4 item may have more than one part or ask you to write something.

Here is some information to help you understand just what a DOK level really is.

Level 1 (Recall of Information)

- * Identify, list, or define something.
- * Questions may start with *who*, *what*, *when*, and *where*.
- * Recall facts, terms, or identify information.

Level 2 (Basic Reasoning)

- * Think about things—it is more than just remembering something.
- * Describe or explain something.
- * Answer the questions “how” or “why.”

Level 3 (Complex Reasoning)

- * Go beyond explaining or describing “how and why.”
- * Explain or justify your answers.
- * Give reasons and evidence for your response.
- * Make connections and explain a concept or a “big idea.”

Level 4 (Extended Reasoning)

- * Complex thinking required!
- * Plan, investigate, or apply a deeper understanding.
- * These items will take more time to write.
- * Connect and relate ideas.
- * Show evidence by doing a task, creating a product, or writing a response.

Depth of Knowledge

Level 1—Recall of Information

Level 1 asks you to identify, list, or define. You may be asked to recall *who, what, when, and where*. You may also be asked to recall facts and terms or identify information in documents, quotations, maps, charts, tables, graphs, or illustrations. Items that ask you to “describe” and/or “explain” could be Level 1 or Level 2. A Level 1 item requires that you just recall, recite, or repeat information.

Skills Demonstrated	Question Cues
<ul style="list-style-type: none"> • Make observations • Recall information • Recognize formulas, properties, patterns, processes • Know vocabulary, definitions • Know basic concepts • Perform one-step processes • Translate from one representation to another • Identify relationships 	<ul style="list-style-type: none"> • Tell who, what, when, or where • Find • List • Define • Identify; label; name • Choose; select • Compute; estimate • Express as • Read from data displays • Order

Level 2—Basic Reasoning

Level 2 includes some thinking that goes beyond recalling or repeating a response. A Level 2 “describe” and/or “explain” item would require that you go beyond a description or explanation of information to describe and/or explain a result or “how” or “why.”

Skills Demonstrated	Question Cues
<ul style="list-style-type: none"> • Apply learned information to abstract and real-life situations • Use methods, concepts, and theories in abstract and real-life situations • Perform multi-step processes • Solve problems using required skills or knowledge (requires more than habitual response) • Make a decision about how to proceed • Identify and organize components of a whole • Extend patterns • Identify/describe cause and effect • Recognize unstated assumptions; make inferences • Interpret facts • Compare or contrast simple concepts/ideas 	<ul style="list-style-type: none"> • Apply • Calculate; solve • Complete • Describe • Explain how; demonstrate • Construct data displays • Construct; draw • Analyze • Extend • Connect • Classify • Arrange • Compare; contrast

Level 3—Complex Reasoning

Level 3 requires reasoning, using evidence, and thinking on a higher level than Level 1 and Level 2. You will go beyond explaining or describing “how and why” to justifying the “how and why” through reasons and evidence. Level 3 items often involve making connections across time and place to explain a concept or a “big idea.”

Skills Demonstrated	Question Cues
<ul style="list-style-type: none"> • Solve an open-ended problem with more than one correct answer • Create a pattern • Generalize from given facts • Relate knowledge from several sources • Draw conclusions • Make predictions • Translate knowledge into new contexts • Compare and discriminate between ideas • Assess value of methods, concepts, theories, processes, and formulas • Make choices based on a reasoned argument • Verify the value of evidence, information, numbers, and data 	<ul style="list-style-type: none"> • Plan; prepare • Predict • Create; design • Ask “what if?” questions • Generalize • Justify; explain why; support; convince • Assess • Rank; grade • Test; judge • Recommend • Select • Conclude

Level 4—Extended Reasoning

Level 4 requires the complex reasoning of Level 3 with the addition of planning, investigating, applying deeper understanding, and/or developing that will require a longer period of time. You may be asked to connect and relate ideas and concepts *within* the content area or *among* content areas in order to be at this highest level. The Level 4 items would be a show of evidence—through a task, a product, or an extended response—that the higher-level demands have been met.

Skills Demonstrated	Question Cues
<ul style="list-style-type: none"> • Analyze and synthesize information from multiple sources • Examine and explain alternative perspectives across a variety of sources • Describe and illustrate how common themes are found across texts from different cultures • Apply mathematical models to illuminate a problem or situation • Design a mathematical model to inform and solve a practical or abstract situation • Combine and synthesize ideas into new concepts 	<ul style="list-style-type: none"> • Design • Connect • Synthesize • Apply concepts • Critique • Analyze • Create • Prove

ENGLISH LANGUAGE ARTS (ELA)

DESCRIPTION OF TEST FORMAT AND ORGANIZATION

The Grade 4 English Language Arts (ELA) EOG assessment has a total of 60 items.

You will answer a variety of item types on the test. Some of the items are selected-response (multiple-choice), which means you choose the correct answer from four choices. Some items will ask you to write your response using details from the text. There will also be a writing prompt that will ask you to write an essay.

The test will be given in three sections.

- Sections 1 and 2 will be given on Day 1. You may have up to 75 minutes to complete each section.
- Section 3 will be given on Day 2. You will be given a maximum of 90 minutes to complete this section.

CONTENT

The Grade 4 English Language Arts (ELA) EOG assessment will measure the Grade 4 standards that are described at www.georgiastandards.org.

The content of the assessment covers standards that are reported under these domains:

- Reading and Vocabulary
- Writing and Language

There are two kinds of texts—fiction (including stories and poems) and informational text.

There are two kinds of essays—an opinion essay and an informational or explanatory essay.

Students will also write extended constructed responses that use narrative techniques such as completing a story, writing a new beginning, or adding dialogue. (Item 4 on page 27 gives an example of a prompt that requires a narrative response.)

ITEM TYPES

The English Language Arts (ELA) portion of the Grade 4 EOG assessment consists of selected-response (multiple-choice), constructed-response, extended constructed-response, and extended writing response items.

ENGLISH LANGUAGE ARTS (ELA) DEPTH OF KNOWLEDGE EXAMPLE ITEMS

Example items that represent applicable DOK levels are provided for you on the following pages. The items and explanations of what is expected of you to answer them will help you prepare for the test.

All example and sample items contained in this guide are the property of the Georgia Department of Education.

Example Item 1

DOK Level 1: This is a DOK level 1 item because it requires the student to distinguish between common and proper nouns.

English Language Arts (ELA) Grade 4 Content Domain II: Writing and Language

Standard: ELAGSE4L2a. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use correct capitalization.

Read the sentence.

My mother picked out our next family car from a dealer in texas.

Which underlined word in the sentence should start with a capital letter?

- A. mother
- B. family
- C. dealer
- D. texas

Correct Answer: D

Explanation of Correct Answer: The correct answer is choice (D) texas. Cities, towns, states, and nations are always capitalized. Choice (A) is incorrect because it is not used as a name. Choices (B) and (C) are incorrect because they are common nouns.

Read the article “Central Park” and answer example items 2 and 3.

Central Park

Before 1850, many of the world’s great cities had nice parks. However, there were no city parks in the United States. New York City was a busy city, but there were no places to escape from the noise or from the smell of horses. Some important people in New York City decided that a park was needed. The city had a contest to see who could design the best park.

There were many different designs for the park. People argued about the purpose of the park. Some people said that it should be like parks in England and France. Those parks were mostly for people who had lots of money. The parks had long, straight roads. People who could afford horses and carriages could ride in the parks. The gardens in those parks were very square. They had lots of large stone buildings. The parks were built like the gardens around palaces.

Other people said that a park should be designed for all the people, not just the rich. That meant the park should be good for walking, and there shouldn’t be long, straight roads. Straight roads and big buildings allowed for less natural scenery.

The plan that the city chose was more like a park for all the people. It included large green areas and curvy walking paths. These paths were built around natural features, like large rocks. The park had very few buildings. It had special paths for horses to keep the animals separate from people. Today, Central Park is considered one of the greatest parks in the world.

Example Item 2

DOK Level 2: This is a DOK level 2 item because the student is asked to apply knowledge of the text in order to answer the question.

English Language Arts (ELA) Grade 4 Content Domain I: Reading and Vocabulary

Genre: Informational

Standard: ELAGSE4RI3. Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

Which of these BEST describes why Central Park was designed to have few straight roads?

- A. Curved roads were better for horses.
- B. More natural features were left in place.
- C. The builders used roads that already existed.
- D. The roads were built to go around the gardens.

Correct Answer: B

Explanation of Correct Answer: The correct answer is choice (B) More natural features were left in place. The park was built to show as much natural scenery as possible, so roads curved around existing rocks and other features. Choice (A) is incorrect because the author does not tell you curved roads are better for horses. Choice (C) is incorrect because the author never says this. Choice (D) is incorrect because the author never mentions gardens in Central Park.

Example Item 3

DOK Level 3: This is a DOK level 3 item because students are asked to draw a conclusion based on the article and support their responses with evidence from the text.

English Language Arts (ELA) Grade 4 Content Domain I: Reading and Vocabulary

Genre: Informational

Standard: ELAGSE4RI1. Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

Think of a park in your town or a park you have visited. Do you think it is designed more like Central Park or like a European park?

Use details from the article to support your answer. Write your answer on the lines provided.

A large rectangular box with a black border, containing ten horizontal lines for writing. The lines are evenly spaced and extend across most of the width of the box, leaving a small margin on both sides.

Scoring Rubric

Points	Description
2	<p>The exemplar shows a full-credit response. It achieves the following:</p> <ul style="list-style-type: none"> • Gives sufficient evidence of the ability to draw a conclusion based on the text and to explain the support for a conclusion drawn about the text • Includes specific examples/details that make clear reference to the text • Adequately explains the conclusion drawn with clearly relevant information based on the text
1	<p>The exemplar shows a 1-point response. It achieves the following:</p> <ul style="list-style-type: none"> • Gives limited evidence of the ability to draw a conclusion based on the text or to explain the support for a conclusion drawn about the text • Includes vague/limited examples/details that make reference to the text • Explains the conclusion drawn with clearly relevant information based on the text
0	<p>The exemplar shows a response that would earn no credit. It achieves the following:</p> <ul style="list-style-type: none"> • Gives no evidence of the ability to draw a conclusion based on the text or to explain the support for a conclusion drawn about the text

Exemplar Response

Points Awarded	Sample Response
2	Roswell Park is a park in my town that is more like Central Park. It has a curved pathway and a lot of trees and views of nature. There is only one building, and it is not large.
1	The park in my town is more like Central Park. It has a curved road.
0	The park in my town is more like Central Park.

Example Item 4

DOK Level 4: This is a DOK Level 4 item because it requires students to read two passages, synthesize information, and respond to an extended writing prompt.

English Language Arts (ELA) Grade 4 Content Domain II: Writing and Language

Genre: Informational

Standard: ELAGSE4W2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

In this section, you will read two passages about two famous pilots. How were Charles Lindbergh and Amelia Earhart alike? You will write an informational essay explaining the ways in which Charles Lindbergh and Amelia Earhart were similar and the ways in which they were different.

Before you begin planning and writing, read these two passages:

1. Charles Lindbergh
2. Amelia Earhart

As you read the passages, think about what details from the passages you might use in your informational essay.

Charles Lindbergh

In 1927, Charles Lindbergh became the first person to fly nonstop across the Atlantic Ocean. This was a famous event in an event-filled life.

Lindbergh was born in 1902. At that time, flying was in its early days. Young Lindbergh found flight fascinating. He left college to go to flight school. After two years, he went into the U.S. Army. He became a pilot for the U.S. Army Air Corps.

After the army, Lindbergh flew for the U.S. Postal Service. He flew a mail plane from St. Louis to Chicago. During this time, he earned his nickname, "Lucky Lindy." He had to jump out of his plane four times. He got lucky and lived every time!

In 1919, a man named Raymond Orteig started a contest. He offered \$25,000 to the first person who could fly across the Atlantic Ocean. Lindbergh spent the next eight years getting the right plane. He named the plane the *Spirit of St. Louis*. Then, in May 1927, he made his famous flight across the Atlantic.

Lindbergh received many awards in his life. One was a Pulitzer Prize for a book he wrote about his life. Lindbergh died at the age of 72.

Amelia Earhart

Amelia Earhart was born in 1898 in Kansas. She was a good student. However, she left college at the age of 19. Soon afterward, Earhart went to an air show in Long Beach, California. It was there that she took her first airplane ride. It changed her life forever. She started taking flying lessons. Earhart spent the next couple of years learning all about flying. She even bought her own plane.

Unfortunately, Earhart ran out of money and had to sell her plane. She went back to school for a while. Then she worked as a teacher and a social worker. In 1927, Charles Lindbergh made his famous flight across the Atlantic Ocean. People began asking, "Who will be the first woman?" In 1928, Earhart was a passenger on a flight across the Atlantic. She was the first woman to fly across the Atlantic. She later wrote a book about the experience. But being a passenger wasn't enough for Amelia.

In 1935, Earhart became the first person to fly from Hawaii to the U.S. mainland. The U.S. government gave her a medal for this. In 1937, she decided to try to fly around the world. She made it to an island in the Pacific Ocean. But then her plane disappeared. She was never found. Earhart will always be remembered, though. She showed the world what women pilots can do.

Now that you have read “Charles Lindbergh” and “Amelia Earhart,” create a plan for and write your informational essay.

WRITING TASK

Think about the ideas in the two passages. Then write an informational essay explaining the ways in which Charles Lindbergh and Amelia Earhart were similar and how they were different.

Be sure to use information from BOTH passages as you write your essay that informs or explains. **Write your answer on the lines provided.**

Before you write, be sure to:

- Think about ideas, facts, definitions, details, and other information and examples you want to use.
- Think about how you will introduce your topic and what the main topic will be for each paragraph.
- Develop your ideas clearly and use your own words, except when quoting directly from the passages.
- Be sure to identify the passages by title or number when using details or facts directly from the passages.

Now write your informational essay. Be sure to:

- Introduce the topic clearly, provide a focus, and organize information in a way that makes sense.
- Use information from the two passages so that your essay includes important details.
- Develop the topic with facts, definitions, details, quotations, or other information and examples related to the topic.
- Use appropriate and varied transitions to connect ideas.
- Clarify the relationships among ideas and concepts.
- Use clear language and vocabulary.
- Provide a conclusion that follows from the information presented.
- Check your work for correct usage, grammar, spelling, capitalization, and punctuation.

A large rectangular box containing 25 horizontal lines, intended for student writing.

The following is an example of a seven-point response. See the seven-point, two-trait rubric for a text-based informational response on pages 60 and 61 to see why this example would earn the maximum number of points.

Example of a Seven-Point Response:

Charles Lindbergh and Amelia Earhart had many similarities. They were both pilots at around the same time. Both left college and studied flying. They were both first at many flying goals, like flying across the Atlantic Ocean. They both wrote books about what they did.

The two pilots were different in some ways, however. One clear difference is that Lindbergh was a man, and Earhart was a woman. Also, Lindbergh didn't have the problems with money that Earhart had. I think the biggest difference between them, though, was that Lucky Lindy had good luck. He survived four plane crashes and lived to be 72 years old. But Earhart didn't have such good luck. She died young from a mysterious flying accident.

In the end, we will remember both Lindbergh and Earhart for being great pilots.

ENGLISH LANGUAGE ARTS (ELA) CONTENT DESCRIPTION AND ADDITIONAL SAMPLE ITEMS

In this section, you will find information about what to study in order to prepare for the Grade 4 English Language Arts EOG assessment. This includes key terms and important vocabulary words. This section also contains practice questions, with an explanation of the correct answers, and activities that you can do with your classmates or family to prepare for the test.

All example and sample items contained in this guide are the property of the Georgia Department of Education.

Unit 1: Reading Literary Text

READING PASSAGES: LITERARY TEXT

CONTENT DESCRIPTION

The literary passages in the English Language Arts (ELA) test are used to identify main ideas and details, cite evidence, make inferences, determine themes, and understand vocabulary.

Key Ideas and Details

- Ideas and details tell you what the story or poem is about.
- Use these ideas and details when writing or speaking about the story or poem.
- Look for central ideas or themes as you read. Ask yourself—what is this about?
- Think about the characters, setting, and events in the story.
- Summarize the important details and ideas after you read.

Structure of the Text

- Make sure you understand the words and phrases as you read.
- Think about how specific words can help you understand the meaning or tone.
- Look at the structure of stories. Pay attention to how the parts of the text (e.g., a section, chapter, scene, or stanza) work with each other and the story or poem as a whole.
- Think about the point of view or purpose of a text.

Understanding What You Read

- Think about the story and visualize, or make a mental picture, as you read.
- Think about the message or what the writer is trying to say.

KEY TERMS

Summarize: To give the main events of a story in the order in which they happen. (RL2)

Character: A person or thing in a work of literature. Goldilocks is a character in “Goldilocks and the Three Bears.” (RL3)

Setting: Where and when a story takes place, including the time of day, the season, or a location. (RL3)

Plot: The events that happen in the beginning, middle, and end of the story. (RL3)

Vocabulary: The meanings of words and phrases and how they are used in the story. (RL4)

Inference: To infer means to come to a reasonable conclusion based on evidence found in the text.

By contrast, an **explicit** idea or message is stated directly by the writer. The author tells the readers exactly what they need to know. (RL1)

Theme: The theme of a literary text is its lesson or message. For example, a story could be about two friends who like to do things together, and the theme might be the importance of friendship. (RL2)

Mythology: Stories about popular beliefs in different cultures. In Greek mythology, the stories of the Greek gods are very well known and sometimes they appear with different names in other cultures, such as Roman mythology. (RL4)

Verse: Writing organized in a rhythmic pattern, as often is the case in poetry. (RL5)

Rhythm: The regular, repeated sounds of words in a poem. (RL5)

Meter: A rhythm that repeats a basic pattern in a poem. (RL5)

Figurative language: You need to distinguish between literal and figurative meanings of words and phrases. *Literal* refers to the actual meaning of words and phrases. Figurative language requires you to analyze the words and sometimes make comparisons.

Examples of figurative language are similes and metaphors. **Similes** make a comparison using a linking word such as *like*, *as*, or *than*. (Her shirt was as green as the grass.) A **metaphor** makes a comparison without a linking word. If someone describes clouds by saying “They were whipped cream,” they are using a metaphor. The clouds looked like whipped cream, but they were not literally whipped cream. (RL4)

Compare vs. contrast: Though similar, comparing is analyzing two things, such as characters or stories, in relation to each other, while contrasting is specifically analyzing the *differences* between two things, such as two different characters or stories. (RL6/RL9)

Point of view: The perspective from which a story is told. The point of view depends upon who the narrator is and how much he or she knows. The point of view could be first person (*I* went to the store), second person (*You* went to the store), or third person (*He* went to the store). The point of view used by the author can have a big influence on his or her story. (RL6)

Genre: A **genre** is a category of passages, such as fiction and nonfiction. Each genre has a particular style, form, and content. (RL9)

Important Tips

- ✍ Use details to support ideas and to answer *what* you know and *how* you know it.
- ✍ When responding to an item, try to answer the question being asked before you read the answer choices.
- ✍ Look for familiar prefixes, suffixes, and word roots to help you decide the meaning of an unknown word.

Sample Items 1–4

Read the story “The Piano” and answer questions 1 through 4.

The Piano

Greta did not like change. She didn’t like it when they changed the design on the wrapper of her favorite kind of ice cream (strawberry mango). She didn’t like it when her father shaved his beard, because it made him look too young. And she didn’t like it when she came home to find this . . . *thing* in the living room. It was old and brown and heavy, and it practically took up a whole wall. It had yellow teeth, and it made noise. It was a piano.

When her older brother Richard started banging on the instrument with his elbows, Greta ran to her room and closed the door. That’s when she noticed something even worse: the toy chest was now in the middle of her room. This was the toy chest that had stood against the wall in the living room forever.

“Don’t you like our new family member?” Greta’s mother asked from outside the door.

Greta opened the door and blurted, “Where did you *get* that thing?”

“The Kleins are moving out, and they didn’t want to move it.”

“The Kleins are moving?” That meant more change. The Kleins had always lived in the apartment down the hall. It was all too much.

“Yes, and it will all be fine,” said Greta’s mother, and she walked back toward the living room.

Greta closed the door, flopped onto her bed facedown, and did what she always did when she didn’t like what was going on: she fell asleep.

In her dream, Greta was floating on a raft in the middle of a river. The breeze stirred the water and made the most beautiful sound. The sound rose and fell and became louder when the wind became stronger.

Greta woke up and opened her eyes, but the sound continued. She got up and stumbled into the living room, where her mother sat at the piano. The sound was pouring out of her mother’s fingers, but she was looking straight ahead with her head cocked slightly to the right. Then she stopped playing and remained still, in a different world.

“Come and sit here,” Greta’s mother said as she scooted over and patted the bench next to her.

“I didn’t know . . . ,” Greta began.

“Of course you didn’t know, because I never told you I could play. I started when I was about five years old.”

“Why did you stop?”

“I didn’t really stop. I guess I kind of drifted away from it. When I moved out of my parents’ house, I left the piano behind, and I never got another one.”

Greta stared at her mother’s face, which held a half smile. “You never should have stopped,” said Greta.

“You might be right,” Greta’s mother said, and she stole a quick look at her daughter.

Greta felt like her mother had just told her a secret, and a bubble of warmth rose inside her.

“Will you play some more?” she asked.

Item 1

What is the **MOST LIKELY** reason Greta’s mother does not go into Greta’s room to comfort her?

- A. She is afraid of Greta’s reaction.
- B. She believes Greta will cheer up soon.
- C. She is not really interested in Greta’s feelings.
- D. She does not want to disturb Greta while she is sleeping.

Item 2

Which of these **BEST** describes the meaning of the phrase *drifted away from it* as it is used in these sentences from the story?

“I didn’t really stop. I guess I kind of drifted away from it. When I moved out of my parents’ house, I left the piano behind, and I never got another one.”

- A. Greta’s mother stopped enjoying music.
- B. Greta’s mother felt sad about playing music.
- C. Greta’s mother stopped playing the piano bit by bit.
- D. Greta’s mother suddenly finished listening to a song.

Item 3

What is the theme of “The Piano,” and how does the author reveal this theme?

Use details from the story to support your answer. Write your answer on the lines provided.

A large rectangular box containing 20 horizontal lines for writing an answer.

Item 4

Write an ending to the story that starts with Greta’s mother saying to Greta, “Now tell me why you were so upset when you saw the piano.”

Be sure that your ending flows naturally from the rest of the story. Use dialogue and descriptions in your answer. Write your answer on the lines provided.

A large rectangular box containing 20 horizontal lines for writing an answer.

Unit 2: Reading Informational Text

READING PASSAGES: INFORMATIONAL TEXT

CONTENT DESCRIPTION

The informational and explanatory passages in the English Language Arts test can be used to determine central ideas, write an objective summary, analyze ideas, and provide supporting text evidence.

Key Ideas and Details

- Read closely to know exactly what the text says.
- Look for details that tell what the text is about.
- Use those details when writing or speaking about the text.
- Look for the central ideas in the text.
- Summarize the important details and ideas.
- Think about how ideas develop and work together in the text.

Structure

- Make sure you understand the words in the text.
- Use a dictionary, thesaurus, or glossary to help you with words that are new.
- Look at how the parts of the text work with each other.
- Think about the author's point of view or purpose in the text.

Understanding the Text

- Think about the story and visualize, or make a mental picture, as you read.
- Think about the text and its message.
- Look for details or evidence in the text.

KEY TERMS

Main idea: The most important idea that the author is trying to say. (RI2)

Details: The facts and ideas that support the main idea of a passage. (RI2)

Summary: A summary contains the most important points but does not give all of the details. (RI2)

Author’s purpose: The author has a specific reason or purpose for writing the passage. Often the author’s purpose is not directly stated. (RI3)

Fact and opinion: A **fact** is a statement that can be proven. An **opinion** is a statement that cannot be proven because it states a writer’s belief or judgment about something. Deciding whether a statement is a fact or an opinion often comes down to a single question: “Can you prove it?” If you can prove a statement, then it is a fact. If not, it’s an opinion. (RI2)

Chronological order: The order in which a series of events happens. A text that is arranged in order of time from the beginning to the end is in chronological order. (RI5)

Cause and effect: This is a relationship where one thing causes another thing to happen. A passage may also be organized by stating the **problem and solution**. (RI3)

Point of view: The opinion of the author. Your opinion may differ from the opinion of the author writing a passage. (RI6)

Evidence: Something that proves the truth of something else. Informational texts may contain evidence in the form of key words, illustrations, maps, or photographs to prove that the information is correct. (RI7)

Firsthand account: A description of events written or told by someone who was actually there. If your friend tells you she fell and hurt her knee, it is a firsthand account. (RI6)

Secondhand account: A description of events written or told by someone who was not actually there, but who got the story from another source. If your friend tells you that your other friend fell and hurt her knee, but the friend telling you didn’t see the fall happen, it is a secondhand account. (RI6)

Important Tips

- ✍ Try to read the questions about an informational text before you read the passage so that you know what to look out for.
- ✍ Use evidence from a passage to help explain what is being said.
- ✍ Use facts and details to support ideas and answer *what* you know and *how* you know it.

Sample Items 5–8

Read the article “The Statue of Liberty” and answer questions 5 through 8.

The Statue of Liberty

The Statue of Liberty is one of the world’s most famous statues. Lady Liberty stands with a torch in her hand. She has been welcoming ships into New York City’s harbor since 1886. Many people know that the statue was a gift from France to the United States. But the story is not that simple.

The idea to make a statue as a gift began in France. An artist named Frédéric-Auguste Bartholdi wanted to build the statue, but he needed the money to do it. He formed a group in France. They decided to raise money in France to pay for the copper statue. However, Lady Liberty needed a base to stand on. That money was to be raised in the United States.

Many people in France gave money for the statue. Even schoolchildren contributed. A copper company gave Bartholdi all the copper he needed.

Bartholdi made the right arm and hand of the statue. It was put on display in Philadelphia and New York City. People became excited about the statue. Americans began to give money to complete it. But there still wasn’t enough money for the base.

Then Bartholdi came up with a good idea. In New York he spread the word that the statue might go to Boston or another city. The idea worked. New Yorkers didn’t want to be left out. The people of New York donated more money. Then Bartholdi could complete the base. Now Lady Liberty stands in New York Harbor. The people of France and the United States worked together. Like most great works, it took a long time. It also took a lot more work than most people think.

Item 5

Which sentence from the article explains why enough money was finally raised for the base?

- A. That money was to be raised in the United States.
- B. People became excited about the statue.
- C. Americans began to give money to complete it.
- D. New Yorkers didn't want to be left out.

Item 6

What does the phrase *spread the word* mean in this sentence from the article?

In New York he spread the word that the statue might go to Boston or another city.

- A. told a lie
- B. kept a secret
- C. wrote a large sign
- D. told a lot of people

Item 7

With which statement would the author **MOST LIKELY** agree?

- A. People often do not know the real story behind events.
- B. No one knows how the Statue of Liberty was really built.
- C. The money for the Statue of Liberty came only from France.
- D. Americans do not care enough about their nation's own history.

Item 8

What is the main idea of the article?

Use details from the article to support your answer. Write your answer on the lines provided.

A large rectangular box containing 20 horizontal lines for writing an answer.

Unit 3: Writing Opinion Texts

CONTENT DESCRIPTION

The opinion passages in the English Language Arts test help you develop opinions and support a point of view on a topic. In your writing, use evidence, examples, quotes, and reasons to develop and support your opinion.

Purpose

- An opinion piece takes a stand or agrees or disagrees with a point of view.
- Some common opinion words are “agree” or “disagree” or “for” or “against.”
- When you state your opinion, you need to support it with reasons, examples, and evidence.

Editing Your Writing

- Check your writing for good organization.
- Make sure your writing fits the task, purpose, and audience.
- Strengthen your writing by planning, revising, editing, rewriting, or trying a new approach.
- Use technology, including the Internet, to do research.

Scoring Rubrics

- Scoring rubrics can be found beginning on page 57. You may find it helpful to read and discuss these with a parent or another adult.
- The rubrics show you what is needed to produce a strong piece of writing.
- Rubrics are important to understand. They tell you what to add to your writing.
- Writing on the EOG assessment will be scored using these rubrics.

KEY TERMS

Topic: What a piece of writing is about. When writing your opinion, choose topics about which you have strong feelings and a lot to say. (W1a)

Reasons: Details that support your opinion in a piece of writing. (W1a)

Purpose: The writer’s reason for writing an essay or article. All writing has a purpose, whether it is to persuade, inform, explain, or entertain. (W1b)

Fact and opinion: A **fact** is a statement that can be proven. An **opinion** is a statement that cannot be proven because it states a writer’s belief or judgment about something. Deciding whether a statement is a fact or an opinion often comes down to a single question: “Can you prove it?” If you can prove a statement somehow, then it is a fact. If not, it’s an opinion. (W1b)

Textual evidence: You need to support your opinions with evidence. Textual evidence includes facts, opinions of experts, quotes, statistics, and definitions. (W1b)





Point of view: The opinion or perspective of the author on a specific topic. (W1c)

Audience: The people who will be reading the piece of writing. Writers should keep their audience in mind and adjust their ideas and vocabulary so that they can be best understood. (W4)

Revision: The process of editing and rewriting a piece of writing. All good writing requires a lot of revision in order to catch mistakes and make ideas clearer. (W5)

Organization: In writing, the organization helps explain ideas and information more clearly. Writers use transitions to organize information. Also, an entire piece of writing has an organizational structure to it. Writers structure their texts to match their purpose and audience. (W1a)

Important Tips

-  Use strong reasons to support your opinions in your writing.
-  Organize your writing by using chronological order, cause and effect, compare and contrast, or asking and answering questions.
-  Make sure your writing has a concluding statement that supports the information or explanation presented.
-  Always read over your writing several times to check your work and catch errors.

Sample Items 9–12

[NOTE: The structure of the practice items for this unit and Unit 4 is as it appears on the Georgia Milestones End-of-Grade assessment: 1) multiple-choice questions (three on the actual test); 2) a constructed-response item; and 3) an extended writing prompt. Additionally, the instructions for the extended writing prompt are in a format that is similar to the one on the End-of-Grade assessment. There is no constructed-response item in Unit 3. There is no extended writing prompt for Unit 4.]

In this section, you will read two passages and answer questions 9 through 12.

WRITING TASK

You will read about the idea of giving students homework on weekends. What are the good and bad things about homework on weekends? You will write an opinion essay in your own words about this idea.

Think about the ideas in the two passages. Then write an essay explaining which opinion about homework on weekends you agree with: homework should be given on the weekend or homework should not be given on the weekend.

Be sure to use information from BOTH passages in your opinion essay. **Write your answer on the lines provided.**

Before you begin planning and writing, you will read two passages and answer three questions about what you have read. As you read the passages, think about what details from the passages you might use in your opinion essay. These are the titles of the passages you will read:

1. Homework on the Weekend
2. Weekends Are for Fun

Homework on the Weekend

Homework on the weekend is an important part of our education. First of all, we go to school to prepare for the real world. In the real world, most people work long hours. They may work nights and on the weekends. Sometimes, they don't have a choice about weekend work. Learning is the same way. It doesn't happen just during the school week. Doing homework on the weekend is another way to help you learn.

It's true that there is no school on the weekends. Many students look at the weekend as a time to play or to do other fun activities. No one is saying you need to stay in and do a lot of homework. You need *some* time for fun. But an hour or so of homework should be fine. There is plenty of time over the weekend to get it done and go have fun as well.

Finally, many students want to go to a college or university. Students do whatever is necessary to help them get into college, even if that means doing homework on the weekend.

Weekends Are for Fun

Homework on the weekends is more harmful than helpful. One university study explored the effects of homework. The study leaders asked “Does homework help students do better in school?” Homework had very little effect on younger kids especially. If homework isn’t helping us, why have it on weekends?

Homework can actually harm students. Young people need their weekends. They should forget about school. They should just be kids. Weekend homework is stressful for kids. It ruins their time off.

On weekends kids should spend time with their families. Sports and hobbies are also important. What happens if kids can’t do these things? They are tired and unhappy on Mondays. Tired, unhappy students don’t perform well. Therefore, teachers should not give homework on the weekends.

Item 9

Why does the author of “Homework on the Weekend” MOST LIKELY mention college?

- A. College students often work jobs on weekends.
- B. Students in college have to study on weekends.
- C. Weekend homework might help students get into college.
- D. College is more like the real world than elementary school is.

Item 10

Which sentence from “Weekends Are for Fun” explains why students would do better in school if they had no homework on weekends?

- A. “Homework had very little effect on younger kids especially.”
- B. “If homework isn’t helping us, why have it on weekends?”
- C. “On weekends kids should spend time with their families.”
- D. “Tired, unhappy students don’t perform well.”

Item 11

Which of these describes something the reader learns from reading both texts?

- A. that homework is important for young kids
- B. that students should think about their futures
- C. that there should be no homework on weekends
- D. that it is important to have time to play on the weekends

Item 12

Now that you have read “Homework on the Weekend” and “Weekends Are for Fun” and answered some questions about what you have read, create a plan for and write your opinion essay.

WRITING TASK

You will read about the idea of giving students homework on weekends. What are the good and bad things about homework on weekends? You will write an opinion essay in your own words about this idea.

Think about the ideas in the two passages. Then write an essay explaining which opinion about homework on weekends you agree with: homework should be given on the weekend or homework should not be given on the weekend.

Be sure to use information from BOTH passages in your opinion essay. **Write your answer on the lines provided.**

Before you write, be sure to:

- Think about ideas, facts, definitions, details, and other information and examples you want to use.
- Think about how you will introduce your topic and what the main topic will be for each paragraph.
- Develop your ideas clearly and use your own words, except when quoting directly from the passages.
- Be sure to identify the passages by title or number when using details or facts directly from the passages.

Now write your opinion essay. Be sure to:

- Introduce your opinion.
- Support your opinion with reasons and details from the passages.
- Give your reasons and details in a clear order.
- Use words, phrases, and clauses to connect your ideas.
- Have a strong conclusion that supports your opinion.
- Check your work for correct usage, grammar, spelling, capitalization, and punctuation.

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Unit 4: Writing Informational/Explanatory Texts

CONTENT DESCRIPTION

The informational/explanatory passages in the English Language Arts test help develop your writing. Informational writing states ideas, summarizes research, and uses information from more than one source.

Text Types and Purposes

- Write informational/explanatory texts to state ideas and information clearly and accurately.
- Use the best details, organize them, and explain them when necessary.

Production and Distribution of Writing

- Produce writing with organization and style that fits the task, purpose, and audience.
- Develop and strengthen writing by planning, revising, editing, rewriting, or trying a new approach.
- Use technology, including the Internet, to produce and share writing.

Audience, Purpose, and Voice

- As you write, remember who your audience will be.
- Make sure your writing is appropriate. Watch your tone, style, and voice.
- Remember, you are writing for a purpose—think about *what* you are writing and *why*.

Range of Writing

- Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

Scoring Rubrics

- Scoring rubrics can be found beginning on page 57. You may find it helpful to read and discuss these with a parent or another adult.
- The rubrics show you what is needed to produce a strong piece of writing.
- Rubrics are important to understand. They tell you what to add to your writing.
- Writing on the EOG assessment will be scored using these rubrics.

KEY TERMS

Informational/explanatory texts: A form of writing that informs the reader or explains something. (W2D)

Introduction: The beginning of a piece of writing. The introduction should let readers know what they will be reading about and set up the main idea of the writing. (W2a)

Organization: The way in which a piece of writing is structured. Similar ideas and illustrations should be grouped together, and the order of the information should make sense. (W2a/W4)






Transition: A word, phrase, or clause that links one idea to the next. Writing should not jump from one idea to the next without transitions that guide the reader to the next idea. Examples include words such as “another,” “for example,” “also,” and “because.” (W2c)

Conclusion: The end of a piece of writing is the conclusion. The conclusion should sum up the main idea of the writing and provide an overall message for the reader. (W2d)

Formatting: The way in which a piece of writing is organized. For example, a writer can use headings and subheadings to organize the writing and present the information in a clear way. (W2a)

Multimedia: A variety of mediums. Writing does not only include pen to paper or a typed essay. Other ways of enhancing writing can include mediums such as art, presentations, photographs, charts, videos, and more. (W2a)

Important Tips

-  Begin by organizing your ideas in different sections. You can use a graphic organizer such as a chart or Venn diagram, or you can create an outline of your piece. Then it will be easier to fill in the supporting details.
-  Be sure to develop your writing with details such as facts, definitions, quotations, or other information that supports your topic.
-  Organize your writing by using chronological order, cause and effect, compare and contrast, or asking and answering questions.
-  Make sure your writing has a concluding statement that supports your central idea.
-  Strengthen your writing by planning, revising, editing, rewriting, or trying a new approach.

Sample Items 13–16

[NOTE: The structure of the practice items for Unit 4 is as it appears on the Georgia Milestones End-of-Grade assessment with the exception of the extended writing prompt: 1) multiple-choice questions (three on the actual test); 2) a constructed-response item; and 3) an extended writing prompt. In this study guide, there is no extended writing prompt for this unit.]

Read the article “Altamira Cave Paintings” and answer questions 13 through 16.

Altamira Cave Paintings

1. Many people think archaeology means digging in the ground for treasures. Digging is only a part of what archaeologists do. They also spend a lot of time studying **artifacts**. Artifacts are things that were made by people in the past. Artifacts need to be protected from the air, the sun, moisture, and other things that can harm them. Artifacts aren’t always found by digging. Sometimes they are in the open. This is one example.
2. In the 1870s in Altamira, Spain, a man and his daughter were exploring a cave. The little girl looked up and saw an amazing sight. Animals were painted on the ceiling! The man’s name was Marcelino Sanz de Sautuola. He was an archaeologist. He looked at the paintings and saw how well they were painted. He thought they were very old. The paintings were in good shape. This is because the cave had been closed by rocks for many years. So it had been protected from sun, wind, and rain. Sautuola and another archaeologist declared that the cave was an archaeological site. They carefully wrote about everything they saw and then made a report about the cave. Sautuola said the paintings were probably 18,000 years old.
3. Many people didn’t believe Sautuola. They said people from so long ago couldn’t have painted that well. Scientists argued about the cave for years. Then other caves were discovered in France. They, too, had amazing paintings on the walls. More people decided that Sautuola was right. One famous archaeologist even wrote an apology to Sautuola.
4. Visitors went to Altamira for many years. But too many people were breathing inside the cave, and the moisture in their breath was damaging the paintings. So, the cave was closed to the public in 1977. People built a museum next to the cave though. It has a life-size model of the cave. Now visitors can see what the paintings are like without hurting them.

Item 13

Which paragraph **BEST** explains why the paintings were found in good condition?

- A. paragraph 1
- B. paragraph 2
- C. paragraph 3
- D. paragraph 4

Item 14

According to the article, how did the discovery of cave paintings in France change archaeologists' views about Altamira?

- A. They started to believe in Sautuola's ideas.
- B. They argued about the French caves for years.
- C. They believed that someone was playing a trick.
- D. They said the Altamira paintings could not be that old.

Item 15

Which word **BEST** explains the meaning of the word *site* in this sentence?

Sautuola and another archaeologist declared that the cave was an archaeological site.

- A. area
- B. building
- C. example
- D. town

Item 16

What would **MOST LIKELY** have happened if the caves at Altamira had stayed open to the public?

Use details from the article to support your answer. Write your answer on the lines provided.

A large rectangular box containing 20 horizontal lines for writing an answer.

Unit 5: Language

CONTENT DESCRIPTION

The language portion of the English Language Arts test focuses on the use of proper grammar, punctuation, spelling, and usage.

Language

- You need to express yourself clearly and in an interesting way.
- Choose your words carefully so your readers understand what you are writing.
- Apply the rules of grammar as you write.

Conventions of Standard English

- Use correct grammar and usage when writing.
- Use correct capitalization, punctuation, and spelling.

Style

- Vary the words you use. Use a dictionary and thesaurus to help you.
- Your writing should be clear and interesting at the same time.
- Use colorful language and different sentence structures.

KEY TERMS

Grammar: The system of rules for language. (L1e)

Usage: Using the correct word when there is a choice (*to, too, two*). (L1e)

Word parts: The prefixes, suffixes, and root words that give clues as to the meaning of words. (L4b)

Pronoun: A part of speech that is used instead of a noun when the meaning of the noun is already understood. *I, we, he, she, they, and it* are all pronouns. (L1a)

Relative pronouns: Words used to refer to a noun that was already mentioned but is being referred to again. Examples of relative pronouns are *who, which, whose, whom, and that*. (L1a)

Verb: A part of speech that represents action or doing. *Jump, walk, ski, and scare* are all verbs. (L1a)

Progressive tense: A tense used to describe an action that is ongoing and has not stopped. For example, *I am walking, I was walking, and I will be walking* are all variations of the progressive tense. (L1b)

Adjective: A part of speech that is a describing word. *Beautiful, tall, blue, and interesting* are all adjectives. (L1a)

Order of adjectives: This refers to the order in which adjectives are correctly listed according to their type. For example, *the big red ball*. (L1d)

Adverb: A part of speech that describes a verb, an adjective, or another adverb. Adverbs usually end in *-ly*. *Quietly, thoroughly, frantically, and lovingly* are all adverbs. (L1a)

Relative adverb: A relative adverb is used to give more details in a sentence. For example, *where, when, and why*. (L1a)

Sentence fragment: A sentence that is incomplete. *A short walk* would be a sentence fragment. The complete sentence would be *I went on a short walk*. (L1f)

Simile: A comparison using *like* or *as*. For example, *She is as pretty as a picture*. (L5a)

Metaphor: A direct comparison that states one thing *is* another. It isn't meant to be literal, but descriptive. For example, *He is an animal on the soccer field* does not mean that the boy is really an animal, but it is a metaphor for how he plays soccer (very aggressively). (L5a)

Coordinating conjunction: A word that is used to combine two simple sentences. For example, *and, or, but*. (L1c)

Prepositional phrases: Phrases that are used to show direction, location, or time. Examples of prepositional phrases are *on the box, in the box, around the box, by the box, and through the box*. (L1e)

Punctuation: Writing marks that help to separate and clarify ideas. Examples of punctuation are the period, comma, colon, exclamation mark, and question mark. (L2)

Context clues: Words and phrases that surround another phrase and help to explain its meaning. Sometimes a word cannot be understood without the context of the words and phrases around it. For example, *he threw it* could mean several things, but when the full sentence is included, *He threw the basketball up high from midcourt and sunk it through the hoop for two points*, the meaning is clear. (L4a)

Synonyms: Words that have the same meaning. *Small* and *little* are synonyms. (L5c)

Antonyms: Words that have opposite meanings. *Small* and *large* are antonyms. (L5c)

Idioms: Sayings and expressions that have figurative or non-literal meanings. Their meanings are mostly suggested. For example, saying something is *a piece of cake* is an idiom. It means that something is easy to do. Another common idiom is *back to square one*. This means to start over again. (L5b)

Important Tips

- ✍ To study for this part of the EOG assessment, concentrate on the kinds of errors you typically make in your own writing. Then review grammar rules for those specific kinds of errors. Use books or free online resources to find practice items that you can try. You can work with a partner and question each other on grammar rules or try editing sentences together. Focus your review time on strengthening the areas or skills that need it the most.
- ✍ When you are faced with an unknown word, go back to the passage. Start reading two sentences before the word appears, and continue reading for two sentences afterward. If that doesn't give you enough clues, look elsewhere in the passage.

Sample Items 17–20

Item 17

Which form of the verb correctly completes the sentence?

Roger _____ when suddenly he heard a knock on the door.

- A. is reading
- B. was reading
- C. will be reading
- D. has been reading

Item 18

In which sentence are the adjectives ordered correctly?

- A. Ted's mother drove a tiny old car.
- B. Melissa lived in a blue large house.
- C. Henry listened to a French tall man singing.
- D. There was a copper strange handle on Cliff's door.

Item 19

Which sentence shows correct use of a prepositional phrase?

- A. I dropped the ball, and it rolled in the creek.
- B. The rain came down of the sky like a waterfall.
- C. Paula pulled the rock out of the water and dried it.
- D. The young parrot left its cage and flew out from the house.

Item 20

In which sentence is the underlined word used correctly?

- A. All the students brought their books to school.
- B. The extra work helped improve my grades to.
- C. Everyone went to Daniela's party accept for Roland.
- D. There is nothing better then cold ice cream on a hot day.

ENGLISH LANGUAGE ARTS (ELA) ADDITIONAL SAMPLE ITEM KEYS

Item	Standard/ Element/ Genre	DOK Level	Correct Answer	Explanation
1	ELAGSE4RL3 Literary	2	B	The correct answer is choice (B) She believes Greta will cheer up soon. This answer is supported by Greta’s mother’s comment, “Yes, and it will all be fine.” Choice (A) is incorrect because there is no evidence that Greta’s mother is afraid of Greta’s reaction. Choice (C) is incorrect because Greta’s mother shows an interest in Greta’s feelings at other points in the story. Choice (D) is incorrect because Greta is not sleeping when her mother first speaks to her.
2	ELAGSE4RL4 Literary	2	C	The correct answer is choice (C) Greta’s mother stopped playing the piano bit by bit. Perhaps unintentionally, Greta’s mother slowly moved away from playing piano. Choice (A) is incorrect because there is no evidence that Greta’s mother stopped enjoying music; she just got out of the habit of playing it. Choice (B) is incorrect because the passage contains no evidence that music made Greta’s mother sad. Choice (D) is incorrect because “drifting away” refers to abandoning piano playing altogether, not discontinuing to listen in the middle of a song.
3	ELAGSE4RL2 Literary	3	N/A	See scoring rubric and sample response on page 52.
4	ELAGSE4W3	4	N/A	See scoring rubric beginning on page 58 and sample response on page 53.
5	ELAGSE4RI1 Informational/ Explanatory	2	D	The correct answer is choice (D) “New Yorkers didn’t want to be left out.” The key word in the question is <i>finally</i> . It was Bartholdi’s “good idea” that inspired donations to complete the pedestal. Choice (A) is incorrect because it refers to the time before fundraising began in the United States. Choice (B) is incorrect because Americans’ initial excitement inspired donations for the statue, not the pedestal. Choice (C) is incorrect because this also refers to the statue rather than the pedestal.

Item	Standard/ Element/ Genre	DOK Level	Correct Answer	Explanation
6	ELAGSE4RI4 Informational/ Explanatory	2	D	The correct answer is choice (D) told a lot of people. Bartholdi wanted to make sure New Yorkers heard what he was saying. Choice (A) is incorrect because the author never states that Bartholdi was lying. Choice (B) is incorrect because “spread the word” means the opposite of keeping a secret; it means telling a lot of people. Choice (C) is incorrect because although a sign could help spread the word, there is no evidence that Bartholdi limited his efforts to a sign.
7	ELAGSE4RI8 Informational/ Explanatory	2	A	The correct answer is choice (A) People often do not know the real story behind events. The author writes, “Many people know . . . [b]ut the story is not that simple.” Choice (B) is incorrect because the author provides information about how the statue came to be built. Choice (C) is incorrect because although some of the money came from France, a significant portion came from the United States. Choice (D) is incorrect because the author does not imply that Americans don’t care about their history; on the contrary, they donated money to make the statue.
8	ELAGSE4RI2 Informational/ Explanatory	3	N/A	See scoring rubric and sample response on page 54.
9	ELAGSE4RI8 Informational/ Explanatory	2	C	The correct answer is choice (C) Weekend homework might help students get into college. The author mentions that college-aspiring students would “do whatever is necessary” to get into college, and the author’s overall purpose is to encourage weekend homework. Choice (A) is incorrect because the author mentions nothing about college students’ jobs. Choices (B) and (D) are incorrect because although they <i>could</i> be used to support the author’s argument, they are less directly related to the author’s final argument than choice (C) is.

Item	Standard/ Element/ Genre	DOK Level	Correct Answer	Explanation
10	ELAGSE4RI1 Informational/ Explanatory	2	D	The correct answer is choice (D) “Tired, unhappy students don’t perform well.” This suggests that if students did no weekend homework, they would be neither tired nor unhappy, and they would perform better than if they had weekend homework. Choices (A) and (B) are incorrect because even if homework has <i>no</i> effect, we cannot logically conclude that students would do <i>better</i> in school if they did no weekend homework; they might perform in exactly the same way. Choice (C) is incorrect because it bears no relevance to the question. The author makes no connection between family time and school performance.
11	ELAGSE4RI1 Informational/ Explanatory	3	D	The correct answer is choice (D) It is important to have time to play on the weekends. This point is mentioned in both articles. Choice (A) is incorrect because the articles don’t say homework is important for young kids. Choice (B) is incorrect because only one of the articles talks about students’ futures. Choice (C) is incorrect because no homework on the weekend is only supported by one of the articles.
12	ELAGSE4W1	4	N/A	See scoring rubric beginning on page 62 and exemplar response on page 55.
13	ELAGSE4RI1 Informational/ Explanatory	2	B	The correct answer is choice (B) paragraph 2. The author mentions that the rocks that sealed the cave protected the paintings for a long time. Choice (A) is incorrect because this paragraph doesn’t mention the paintings. Choice (C) is incorrect because the condition of the paintings isn’t mentioned in this paragraph. Choice (D) is incorrect because it discusses the condition of the paintings only after they were displayed.
14	ELAGSE4RI8 Informational/ Explanatory	2	A	The correct answer is choice (A) They started to believe in Sautuola’s ideas. The discovery of similar caves in France changed people’s minds; they decided Sautuola had been right about the age of the Altamira paintings. Choice (B) is incorrect because the long argument occurred before the French cave paintings were discovered. Choice (C) is incorrect because the author never mentions a suspected trick. Choice (D) is incorrect because this happened before the French paintings were discovered.

Item	Standard/ Element/ Genre	DOK Level	Correct Answer	Explanation
15	ELAGSE4RI4 Informational/ Explanatory	3	A	The correct answer is choice (A) area. An archaeological site is a place or an area where artifacts are discovered and studied. Choice (B) is incorrect because a site is not a building in this sentence. Choice (C) is incorrect because a site in this sentence is a place and not an example of something. Choice (D) is incorrect because a site is not a town in this sentence.
16	ELAGSE4RI1 Informational/ Explanatory	4	N/A	See scoring rubric and sample response on page 56.
17	ELAGSE4L1b	2	B	The correct answer is choice (B) was reading. The reading was an activity that was taking place when Roger heard the knock. Choice (A) is incorrect because it is the wrong tense of the verb. Choice (C) is incorrect because the action of the entire sentence occurred in the past, not the future. Choice (D) is incorrect because it is the wrong tense of the verb.
18	ELAGSE4L1d	2	A	The correct answer is choice (A) Ted's mother drove a tiny old car. Size-related adjectives come before age-related adjectives. Choice (B) is incorrect because size comes before color. Choice (C) is incorrect because national origin comes after size. Choice (D) is incorrect because opinion comes before material.
19	ELAGSE4L1e	2	C	The correct answer is choice (C) Paula pulled the rock out of the water and dried it. The phrase "of the water" is a correctly used prepositional phrase. Choice (A) is incorrect because the correct preposition of motion in this use is <i>into</i> , not <i>in</i> . Choice (B) is incorrect because the prepositional phrase should read " from the sky." Choice (D) is incorrect because the prepositional phrase should be " of the house."
20	ELAGSE4L1g	2	A	The correct answer is choice (A) All the students brought <u>their</u> books to school. The writer does not make the common mistake of using <i>there</i> . Choice (B) is incorrect because the correct word is <i>too</i> , not <i>to</i> . Choice (C) is incorrect because the correct word is <i>except</i> ; <i>accept</i> does not make sense. Choice (D) is incorrect because the correct word is <i>than</i> —a word of comparison rather than a word of sequence.

ENGLISH LANGUAGE ARTS (ELA) SAMPLE SCORING RUBRICS AND EXEMPLAR RESPONSES

Item 3

Scoring Rubric

Points	Description
2	<p>The exemplar shows a full-credit response. It achieves the following:</p> <ul style="list-style-type: none"> • Gives sufficient evidence of the ability to determine the theme of a story • Includes specific examples/details that make clear reference to the text • Adequately analyzes the characters and relates their experiences to the theme
1	<p>The exemplar shows a 1-point response. It achieves the following:</p> <ul style="list-style-type: none"> • Gives limited evidence of the ability to determine the theme of a story • Includes vague/limited examples/details that make reference to the text • Analyzes the characters somewhat accurately but poorly relates their experiences to the theme
0	<p>The exemplar shows a response that would earn no credit. It achieves the following:</p> <ul style="list-style-type: none"> • Gives no evidence of the ability to determine the theme of a story

Exemplar Response

Points Awarded	Sample Response
2	The theme of the story is not to judge change as always being bad. Greta immediately reacts with suspicion and dread to the new piano. By the end of the story, though, she has learned to welcome it. She has also learned something about her mother that has brought them closer together.
1	The theme of the story is to think before you judge a change.
0	This story is about a girl and her mother.

Item 4

To view the four-point holistic rubric for a text-based narrative response, see pages 58 and 59.

Exemplar Response

Points Awarded	Sample Response
4	<p>Greta’s mother said, “Now tell me why you were so upset when you saw the piano.”</p> <p>“Well, for one thing, you know me. I don’t like surprises.”</p> <p>“That’s for sure! I did know that,” her mother said.</p> <p>“Well, then Richard was pounding on the piano really loudly. And it replaced my toy chest. My toy chest has always been in that spot in the living room.” Greta felt a little foolish for a moment. She giggled softly.</p> <p>“Well,” said her mother, raising her eyebrows, “we could always bring the toy chest back in here and get rid of the piano. Then you can play with your stuffed animals all day. . . .”</p> <p>They both laughed.</p> <p>“Now let me show you a simple little melody,” Greta’s mother said, turning to the piano keys.</p>
3	<p>Greta’s mother said, “Now tell me why you were so upset when you saw the piano.”</p> <p>“Because I don’t like change. And this thing was a big change.”</p> <p>“Okay,” said her mother. “I understand.”</p> <p>Her mother then gave Greta her first piano lesson.</p>
2	<p>Greta’s mother said, “Now tell me why you were so upset when you saw the piano.”</p> <p>“Because I don’t like change. And this thing was a big change.”</p> <p>“Okay. Let me play for you.”</p>
1	<p>Greta’s mother said, “Now tell me why you were so upset when you saw the piano.”</p> <p>“Because I didn’t want Richard to play it.”</p>
0	<p>The response is completely irrelevant or incorrect, or there is no response.</p>

Item 8

Scoring Rubric

Points	Description
2	<p>The exemplar shows a full-credit response. It achieves the following:</p> <ul style="list-style-type: none"> • Gives sufficient evidence of the ability to determine the main idea or to explain the support for a main idea • Includes specific examples/details that make clear reference to the text • Adequately explains the main idea or gives an explanation with clearly relevant information based on the text
1	<p>The exemplar shows a 1-point response. It achieves the following:</p> <ul style="list-style-type: none"> • Gives limited evidence of the ability to determine the main idea or to explain the support for a main idea • Includes vague/limited examples/details that make reference to the text • Explains the main idea or gives an explanation with vague/limited information based on the text
0	<p>The exemplar shows a response that would earn no credit. It achieves the following:</p> <ul style="list-style-type: none"> • Gives no evidence of the ability to determine the main idea or to explain the support for a main idea

Exemplar Response

Points Awarded	Sample Response
2	The passage is mainly about the process of raising money for the Statue of Liberty. Bartholdi's group raised money for the statue in France and then went to the United States to raise money for the pedestal. Many different people donated money for the statue and the pedestal. Many Americans do not know the story behind their statue.
1	The main idea of the passage is that raising money for the Statue of Liberty was difficult.
0	The passage is about the Statue of Liberty.

Item 12

The following is an example of a seven-point response. See the seven-point, two-trait rubric for a text-based opinion response on pages 62 and 63 to see why this example would earn the maximum number of points.

Example of a Seven-Point Response:

The author of "Weekends Are for Fun" makes the stronger argument. First of all, the author cites a study that showed that homework really has no effect, especially on younger students. We can conclude from this that there is no good reason to give homework to younger students on the weekend.

The author goes on to say that homework actually harms students. The reasons are convincing because things like family time and school sports are something we all have experience with. The author of "Homework on the Weekend," on the other hand, gives opinions about the real world. As young people, we don't know that much about the real world. However, we do know what we need now. And what we need is time to be young.

Item 16

Scoring Rubric

Points	Description
2	<p>The exemplar shows a full-credit response. It achieves the following:</p> <ul style="list-style-type: none"> • Gives sufficient evidence of the ability to draw a conclusion based on the text and to explain the support for a conclusion drawn about the text • Includes specific examples/details that make clear reference to the text • Adequately explains the conclusion drawn with clearly relevant information based on the text
1	<p>The exemplar shows a 1-point response. It achieves the following:</p> <ul style="list-style-type: none"> • Gives limited evidence of the ability to draw a conclusion based on the text or to explain the support for a conclusion drawn about the text • Includes vague/limited examples/details that make reference to the text • Explains the conclusion drawn with clearly relevant information based on the text
0	<p>The exemplar shows a response that would earn no credit. It achieves the following:</p> <ul style="list-style-type: none"> • Gives no evidence of the ability to draw a conclusion based on the text or to explain the support for a conclusion drawn about the text

Exemplar Response

Points Awarded	Sample Response
2	Artifacts that are exposed to air, sun, or water can lose their shape or color or disappear entirely. The paintings in the caves are artifacts. The problem with leaving the caves open is human breath, which contains moisture. The paintings would probably have lost their color and eventually would have disappeared if they had been left open.
1	They would be harmed due to all the breathing from the visitors.
0	The paintings would get hurt.

ENGLISH LANGUAGE ARTS (ELA) WRITING RUBRICS

Grade 4 items that are not machine-scored—i.e., constructed-response, extended constructed-response, and extended writing response items—are manually scored using either a holistic rubric or a two-trait rubric.

Four-Point Holistic Rubric

Genre: Narrative

A holistic rubric evaluates one major feature, which is ideas. On the Georgia Milestones EOG assessment, a holistic rubric is scored from zero to four. Each point value represents the difference in the levels or quality of the student's work. To score an item on a holistic rubric, the scorer need only choose the description and associated point value that best represents the student's work. Increasing point values represent a greater understanding of the content and, thus, a higher score.

Seven-Point, Two-Trait Rubric

Genre: Opinion or Informational/Explanatory

A two-trait rubric, on the other hand, evaluates two major traits, which are conventions and ideas. On the Georgia Milestones EOG assessment, a two-trait rubric contains two scales, one for each trait, ranging from zero to three on one scale (conventions) and zero to four on the other (ideas). A score is given for each of the two traits, for a total of seven possible points for the item. To score an item on a two-trait rubric, a scorer must choose the description and associated point value for each trait that best represents the student's work. The two scores are added together. Increasing point values represent a greater understanding of the content and, thus, a higher score.

On the following pages are the rubrics that will be used to evaluate writing on the Georgia Milestones Grade 4 English Language Arts EOG assessment.

Four-Point Holistic Rubric

Genre: Narrative

Writing Trait	Points	Criteria
<p><i>This trait examines the writer's ability to effectively develop real or imagined experiences or events using effective techniques, descriptive details, and clear event sequences based on a text that has been read.</i></p>	4	<p><i>The student's response is a well-developed narrative that fully develops a real or imagined experience based on text as a stimulus.</i></p> <ul style="list-style-type: none"> • Effectively establishes a situation and introduces a narrator and/or characters • Organizes an event sequence that unfolds naturally • Effectively uses narrative techniques, such as dialogue and description, to develop rich, interesting experiences and events or show the responses of characters to situations • Uses a variety of words and phrases consistently to signal the sequence of events • Uses concrete words, phrases, and sensory language consistently and effectively to convey experiences and events precisely • Provides a conclusion that follows from the narrated experiences or events • Integrates ideas and details from source material effectively • Has very few or no errors in usage and/or conventions that interfere with meaning*
	3	<p><i>The student's response is a complete narrative that develops a real or imagined experience based on text as a stimulus.</i></p> <ul style="list-style-type: none"> • Establishes a situation and introduces one or more characters • Organizes events in a clear, logical order • Uses narrative techniques, such as dialogue and description, to develop experiences and events or show the responses of characters to situations • Uses words and/or phrases to indicate sequence • Uses words, phrases, and details to convey experiences and events • Provides an appropriate conclusion • Integrates some ideas and/or details from source material • Has a few minor errors in usage and/or conventions that interfere with meaning*
	2	<p><i>The student's response is an incomplete or oversimplified narrative based on text as a stimulus.</i></p> <ul style="list-style-type: none"> • Introduces a vague situation and at least one character • Organizes events in a sequence but with some gaps or ambiguity • Attempts to use a narrative technique, such as dialogue and description, to develop experiences and events or show the responses of characters to situations • Uses occasional signal words to indicate sequence • Uses some words or phrases inconsistently to convey experiences and events • Provides a weak or ambiguous conclusion • Attempts to integrate ideas or details from source material • Has frequent errors in usage and conventions that sometimes interfere with meaning*

Four-Point Holistic Rubric

Genre: Narrative (continued)

Writing Trait	Points	Criteria
<p><i>This trait examines the writer’s ability to effectively develop real or imagined experiences or events using effective techniques, descriptive details, and clear event sequences based on a text that has been read.</i></p>	1	<p><i>The student’s response provides evidence of an attempt to write a narrative based on text as a stimulus.</i></p> <ul style="list-style-type: none"> • Response is a summary of the story • Provides a weak or minimal introduction of a situation or a character • May be too brief to demonstrate a complete sequence of events • Shows little or no attempt to use dialogue or description to develop experiences and events or show the responses of characters to situations • Uses words that are inappropriate, overly simple, or unclear • Provides few, if any, words that convey events • Provides a minimal or no conclusion • May use few, if any, ideas or details from source material • Has frequent major errors in usage and conventions that interfere with meaning*
	0	<p><i>The student’s response is flawed for various reasons and will receive a condition code:</i></p> <ul style="list-style-type: none"> • Code A: Blank • Code B: Copied • Code C: Too Limited to Score/Illegible/Incomprehensible • Code D: Non-English/Foreign Language • Code E: Off Topic/Off Task/Offensive

*Students are responsible for language conventions learned in their current grade as well as in prior grades. Refer to the language skills for each grade to determine the grade-level expectations for grammar, syntax, capitalization, punctuation, and spelling. Also refer to the “Language Progressive Skills, by Grade” chart in Appendix A for those standards that need continued attention beyond the grade in which they were introduced.

Seven-Point, Two-Trait Rubric

Trait 1 for Informational/Explanatory Genre

Writing Trait	Points	Criteria
<p>Idea Development, Organization, and Coherence</p> <p><i>This trait examines the writer's ability to effectively establish a controlling idea and to support the idea with evidence from the text(s) read and to elaborate on the idea with examples, illustrations, facts, and other details in order. The writer must integrate the information from the text(s) into his/her own words and arrange the ideas and supporting evidence (from text that they have read) in order to create cohesion for an informative/explanatory essay.</i></p>	4	<p><i>The student's response is a well-developed informative/explanatory text that examines a topic in depth and conveys ideas and information clearly based on text as a stimulus.</i></p> <ul style="list-style-type: none"> • Effectively introduces a topic • Groups related ideas together to give some organization to the writing • Effectively develops the topic with multiple facts, definitions, concrete details, quotations, or other information and examples related to the topic • Effectively uses linking words and phrases to connect ideas within categories of information • Uses precise language and domain-specific vocabulary to explain the topic • Provides a strong concluding statement or section related to the information or explanation presented
	3	<p><i>The student's response is a complete informative/explanatory text that examines a topic and presents information based on a text as a stimulus.</i></p> <ul style="list-style-type: none"> • Introduces a topic • Develops the topic with some facts, definitions, and details • Groups some related ideas together to give partial organization to the writing • Uses some linking words to connect ideas within categories of information, but relationships may not always be clear • Uses some precise language and domain-specific vocabulary to explain the topic • Provides a concluding statement or section
	2	<p><i>The student's response is an incomplete or oversimplified informative/explanatory text that cursorily examines a topic.</i></p> <ul style="list-style-type: none"> • Attempts to introduce a topic • Attempts to develop a topic with too few details, but not all of these are supported or relevant to the topic • Ineffectively groups some related ideas together • Uses few linking words to connect ideas, but not all ideas are well connected to the topic • Uses limited language and vocabulary that does not clearly explain the topic • Provides a weak concluding statement or section
	1	<p><i>The student's response is a weak attempt to write an informative/explanatory text that examines a topic.</i></p> <ul style="list-style-type: none"> • May not introduce a topic or topic is unclear • May not develop a topic • May be too brief to group any related ideas together • May not use any linking words to connect ideas • Uses vague, ambiguous, or repetitive language • Provides a minimal or no concluding statement or section
	0	<p><i>The student's response is flawed for various reasons and will receive a condition code:</i></p> <ul style="list-style-type: none"> • Code A: Blank • Code B: Copied • Code C: Too Limited to Score/Illegible/Incomprehensible • Code D: Non-English/Foreign Language • Code E: Off Topic/Off Task/Offensive

Seven-Point, Two-Trait Rubric

Trait 2 for Informational/Explanatory Genre

Writing Trait	Points	Criteria
<p>Language Usage and Conventions</p> <p><i>This trait examines the writer's ability to demonstrate control of sentence formation, usage, and mechanics as embodied in the grade-level expectations of the language standards.</i></p>	3	<p><i>The student's response demonstrates full command of language usage and conventions.</i></p> <ul style="list-style-type: none"> • Has clear and complete sentence structure, with appropriate range and variety • Shows knowledge of language and its conventions when writing • Any errors in usage and conventions do not interfere with meaning*
	2	<p><i>The student's response demonstrates partial command of language usage and conventions.</i></p> <ul style="list-style-type: none"> • Has complete sentences, with some variety • Shows some knowledge of language and its conventions when writing • Has minor errors in usage and conventions with no significant effect on meaning*
	1	<p><i>The student's response demonstrates weak command of language usage and conventions.</i></p> <ul style="list-style-type: none"> • Has fragments, run-ons, and/or other sentence structure errors • Shows little knowledge of language and its conventions when writing • Has frequent errors in usage and conventions that interfere with meaning*
	0	<p><i>The student's response is flawed for various reasons and will receive a condition code:</i></p> <ul style="list-style-type: none"> • Code A: Blank • Code B: Copied • Code C: Too Limited to Score/Illegible/Incomprehensible; • Code D: Non-English/Foreign Language • Code E: Off Topic/Off Task/Offensive

*Students are responsible for language conventions learned in their current grade as well as in prior grades. Refer to the language skills for each grade to determine the grade-level expectations for grammar, syntax, capitalization, punctuation, and spelling. Also refer to the "Language Progressive Skills, by Grade" chart in Appendix A for those standards that need continued attention beyond the grade in which they were introduced.

Seven-Point, Two-Trait Rubric

Trait 1 for Opinion Genre

Writing Trait	Points	Criteria
<p>Idea Development, Organization, and Coherence</p> <p><i>This trait examines the writer's ability to effectively establish a point of view and to support the opinion with reasons from the text(s) read. The writer must form an opinion from the text(s) in his/her own words and organize reasons for the opinion (from text that they have read) in order to create cohesion for an opinion essay.</i></p>	4	<p><i>The student's response is a well-developed opinion piece that effectively examines a topic and supports a point of view, with reasons, clearly based on text as a stimulus.</i></p> <ul style="list-style-type: none"> • Effectively introduces a topic and clearly states an opinion • Creates an effective organizational structure that logically groups ideas and reasons to support the writer's purpose • Provides clear reasons that are supported by facts and details • Uses linking words and phrases effectively to connect opinions and reasons • Provides a strong concluding statement or section related to the opinion presented
	3	<p><i>The student's response is a complete opinion piece that examines a topic and supports a point of view based on text.</i></p> <ul style="list-style-type: none"> • Introduces a topic and states an opinion • Provides some organizational structure that groups ideas and reasons to support the writer's purpose • Provides reasons that are supported by facts • Uses some linking words to connect opinions and reasons • Provides a concluding statement or section related to the opinion presented
	2	<p><i>The student's response is an incomplete or oversimplified opinion piece that examines a topic and partially supports a point of view based on text.</i></p> <ul style="list-style-type: none"> • Attempts to introduce a topic and state an opinion • Attempts to provide some organization, but structure sometimes impedes the reader • Attempts to provide reasons that are sometimes supported by facts • Uses few linking words to connect opinions and reasons; connections are not always clear • Provides a weak concluding statement or section that may not be related to the opinion
	1	<p><i>The student's response is a weak attempt to write an opinion piece that examines a topic and does not support a text-based point of view.</i></p> <ul style="list-style-type: none"> • May not introduce a topic or state an opinion • May not have any organizational structure evident • May not provide reasons that are supported by facts • May not use any linking words to connect opinions and reasons • Provides a minimal or no concluding statement or section
	0	<p><i>The student's response is flawed for various reasons and will receive a condition code:</i></p> <ul style="list-style-type: none"> • Code A: Blank • Code B: Copied • Code C: Too Limited to Score/Illegible/Incomprehensible • Code D: Non-English/Foreign Language • Code E: Off Topic/Off Task/Offensive

Seven-Point, Two-Trait Rubric

Trait 2 for Opinion Genre

Writing Trait	Points	Criteria
<p>Language Usage and Conventions</p> <p><i>This trait examines the writer’s ability to demonstrate control of sentence formation, usage, and mechanics as embodied in the grade-level expectations of the language standards.</i></p>	3	<p><i>The student’s response demonstrates full command of language usage and conventions.</i></p> <ul style="list-style-type: none"> • Has clear and complete sentence structure, with appropriate range and variety • Shows knowledge of language and its conventions when writing • Any errors in usage and conventions do not interfere with meaning*
	2	<p><i>The student’s response demonstrates partial command of language usage and conventions.</i></p> <ul style="list-style-type: none"> • Has complete sentences, with some variety • Shows some knowledge of language and its conventions when writing • Has minor errors in usage and conventions with no significant effect on meaning*
	1	<p><i>The student’s response demonstrates weak command of language usage and conventions.</i></p> <ul style="list-style-type: none"> • Has fragments, run-ons, and/or other sentence structure errors • Shows little knowledge of language and its conventions when writing • Has frequent errors in usage and conventions that interfere with meaning*
	0	<p><i>The student’s response is flawed for various reasons and will receive a condition code:</i></p> <ul style="list-style-type: none"> • Code A: Blank • Code B: Copied • Code C: Too Limited to Score/Illegible/Incomprehensible • Code D: Non-English/Foreign Language • Code E: Off Topic/Off Task/Offensive

*Students are responsible for language conventions learned in their current grade as well as in prior grades. Refer to the language skills for each grade to determine the grade-level expectations for grammar, syntax, capitalization, punctuation, and spelling. Also refer to the “Language Progressive Skills by, Grade” chart in Appendix A for those standards that need continued attention beyond the grade in which they were introduced.

ACTIVITY

The following activity develops skills in Unit 1: Reading Literary Text.

Standards: ELAGSE4.RL.1, ELAGSE4.RL.2, ELAGSE3.RL.3

Preparation: Have a parent or guardian help locate and print out 15 fables. Copies of fables can be located through an online search for Aesop’s fables. Next, cut out each story. Finally, cut out the theme at the end of each story. (Keep “The Dog, Cock and Fox” separate for the example.) Ask your parent or guardian to shuffle the remaining themes and provide you with a stack of stories and a stack of themes.

Example:

- Read the fable “The Dog, Cock and Fox.”
- At the end, try to figure out the theme of the story.
- Read the theme on the strip of paper cut from the original fable: “Those who try to entrap others are often caught by their own schemes.”

Read the first story in the stack provided to you.

1. Work to come up with a theme and write it down.
2. Next, look through the stack of themes and find the one you believe is the best match.
3. Continue steps one and two for the remaining stories.
4. Ask your parent or guardian to confirm the intended theme for each of the stories by going back online.

ACTIVITY

The following activity develops skills in Unit 5: Language.

Standard: ELAGSE4L5c

Preparation: Number 40 simple note cards on one side from 1 to 40.

This activity is based on the game Concentration. Work with a friend or family member to think of 20 words and each word's synonym, for a total of 40 words. Shuffle the cards, and lay them out on a table, number-side down. Choose two cards at random. On one card, write the word. On the other card, write its synonym. Do not look at the numbered sides, and set aside those two cards. Continue until all cards are completed. Shuffle the cards when you are done.

Examples: Words and Synonyms

- | | |
|------------|-----------------|
| 1. destroy | 13. ruin |
| 2. eat | 18. consume |
| 3. explore | 24. investigate |
| 4. protect | 32. safeguard |

Arrange the cards on a table in five rows of eight, with the numbers up, from 1 to 40.

Pick two cards to be turned over. If the words on the cards do not match as synonyms, the cards must be turned back over. Now, the other person gets a turn. Whenever a match is found, the person who finds it gets a point and the matched pair is removed from the table.

Variation:

After the cards have been created, work independently to find the matches.

MATHEMATICS

DESCRIPTION OF TEST FORMAT AND ORGANIZATION

The Grade 4 Mathematics EOG assessment consists of a total of 73 items.

You will answer a variety of item types on the test. Some of the items are selected-response (multiple-choice), which means you choose the correct answer from four choices. Some items will ask you to write your response.

The test will be given in two sections.

- You may have up to 85 minutes per section to complete Sections 1 and 2.
- The test will take about 120 to 170 minutes.

CONTENT

The Grade 4 Mathematics EOG assessment will measure the Grade 4 standards that are described at www.georgiastandards.org.

The content of the assessment covers standards that are reported under these domains:

- Operations and Algebraic Thinking
- Number and Operations in Base 10
- Number and Operations—Fractions
- Measurement and Data
- Geometry

ITEM TYPES

The Mathematics portion of the Grade 4 EOG assessment consists of selected-response (multiple-choice) items, constructed-response items, and extended constructed-response items.

MATHEMATICS DEPTH OF KNOWLEDGE EXAMPLE ITEMS

Example items that represent applicable DOK levels are provided for you on the following pages. The items and explanations of what is expected of you to answer them will help you prepare for the test.

All example and sample items contained in this guide are the property of the Georgia Department of Education.




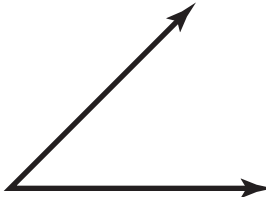
Example Item 1

DOK Level 1: This is a DOK level 1 item because it assesses recall of a vocabulary term and its definition.

Mathematics Grade 4 Content Domain: Geometry

Standard: MGSE4.G.1. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.

Which of these figures **BEST** models a ray?

- A. 
- B. 
- C. 
- D. 

Correct Answer: A

Explanation of Correct Answer: The correct answer is choice (A). A ray is a part of a line with a starting point, but no ending point. Choice (B) is incorrect because it is a line segment, a part of a line with starting and ending points. Choice (C) is incorrect because it is a line; it has neither a starting nor an ending point. Choice (D) is incorrect because it is an acute angle, formed by two rays.

Example Item 2

DOK Level 2: This is a DOK level 2 item because it assesses both the application of adding fractions with like denominators and the interpretation of knowledge about a whole and parts of a whole to combine fractions.

Mathematics Grade 4 Content Domain: Number and Operations–Fractions

Standard: MGSE4.NF.3. Understand a fraction a/b with $a > 1$ as a sum of fraction $1/b$.
d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.

Matt has four leftover pieces of fabric from some projects. The lengths of the pieces are $\frac{1}{3}$ yard, $\frac{2}{3}$ yard, $\frac{1}{3}$ yard, and $\frac{2}{3}$ yard.

Part A: How much leftover fabric does Matt have in all?

Matt has _____ yard(s) of leftover fabric.

Part B: Explain how you found the answer.

Scoring Rubric

Points	Description
2	<p>The response achieves the following:</p> <ul style="list-style-type: none"> The response demonstrates a complete understanding of adding fractions with like denominators with a sum greater than 1. Give 2 points for the correct sum and correct explanation. <ul style="list-style-type: none"> Response is correct and complete. Response shows application of a reasonable and relevant strategy. Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols as appropriate.
1	<p>The response achieves the following:</p> <ul style="list-style-type: none"> The response demonstrates a partial understanding of adding fractions with like denominators with a sum greater than 1. Give 1 point for Part A OR Part B correct. <ul style="list-style-type: none"> Response is mostly correct but contains either a computation error or an unclear or incomplete explanation. Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.
0	<p>The response achieves the following:</p> <ul style="list-style-type: none"> The response demonstrates no understanding of adding fractions with like denominators with a sum greater than 1. <ul style="list-style-type: none"> Response is incorrect. Response shows no application of a strategy. Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Exemplar Response

Points Awarded	Sample Response
2	<p>Part A: 2 yards. Part B: I added all the fractions.</p>
1	<p>Part A: 2 yards.</p>
0	<p><i>Response is irrelevant, inappropriate, or not provided.</i></p>

Example Item 3

DOK Level 3: This is a DOK level 3 item because it assesses finding all factor pairs of a whole number, identifying the factors as prime or composite, and explaining the difference between prime and composite numbers.

Mathematics Grade 4 Content Domain: Number and Operations in Base 10

Standard: MGSE4.OA.4. Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.

Part A: Find all of the factor pairs of 32.

<hr/>

Part B: Identify each factor as *prime*, *composite*, or *neither*.

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Part C: Explain the difference between prime and composite numbers.

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Scoring Rubric

Points	Description
4	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates a complete understanding of identifying factor pairs of whole numbers and of identifying prime and composite numbers. • Give 4 points for 3 parts answered correctly. <ul style="list-style-type: none"> • Response is correct and complete. • Response shows application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols as appropriate.
3	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates a good understanding of identifying factor pairs of whole numbers and of identifying prime and composite numbers. • Give 3 points for 2 parts correct OR 3 parts only partially correct. <ul style="list-style-type: none"> • Response is mostly correct, but contains either a computation error or an unclear or incomplete explanation. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.
2	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates a partial understanding of identifying factor pairs of whole numbers and of identifying prime and composite numbers. • Give 2 points for 1 part correct OR 2 parts partially correct. <ul style="list-style-type: none"> • Response is only partially correct. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.
1	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates a limited understanding of identifying factor pairs of whole numbers and of identifying prime and composite numbers. • Give 1 point for 1 part partially correct. <ul style="list-style-type: none"> • Response is only partially correct. • Response shows incomplete or inaccurate application of a relevant strategy. • Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.
0	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates no understanding of identifying factor pairs of whole numbers and of identifying prime and composite numbers. <ul style="list-style-type: none"> • Response is incorrect. • Response shows no application of a strategy. • Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Exemplar Response

Points Awarded	Sample Response
4	<p>Part A: The factor pairs of 32 are: 1 and 32; 2 and 16; 4 and 8</p> <p>Part B: prime: 2 composite: 4, 8, 16, 32 neither: 1</p> <p>Part C: A prime number is a number with exactly two factors—itsself and one. Two is a prime number because its only factors are 2 and 1. A composite number has more than two factors. For example, 8 is a composite number because its factors are 1, 2, 4, and 8. One is neither a prime nor a composite number.</p>
3	<p>Part A: The factor pairs of 32 are: 1 and 32; 2 and 16; 4 and 8</p> <p>Part B: prime: 2 composite: 4, 8, 16, 32 neither: 1</p>
2	<p>Part A: The factor pairs of 32 are: 1 and 32; 2 and 16; 4 and 8</p>
1	<p>Part A: The factor pairs of 32 are: 2 and 16; 4 and 8</p>
0	<p><i>Response is irrelevant, inappropriate, or not provided.</i></p>

MATHEMATICS CONTENT DESCRIPTION AND ADDITIONAL SAMPLE ITEMS

In this section, you will find information about what to study in order to prepare for the Grade 4 Mathematics EOG test. This includes key terms and important vocabulary words. This section also contains practice questions, with an explanation of the correct answers, and activities that you can do on your own or with your classmates or family to prepare for the test.

All example and sample items contained in this guide are the property of the Georgia Department of Education.

CONTENT DESCRIPTION

- Perform multi-digit multiplication and develop an understanding of dividing to find quotients involving multi-digit dividends
- Develop an understanding of fractions
- Multiplication of fractions by whole numbers
- Generate and analyze patterns
- Analyze and classify geometric figures based on their properties
- Represent and interpret data
- Understand concepts of angles and measure angles

Unit 1: Whole Numbers, Place Value, and Rounding in Computation

In this unit, you will work with the place value system. You will round, compare, and estimate numbers. You will use word problems with more than one step and write equations with unknown numbers.

KEY TERMS

Model **word problems** involving **more than one step** by writing an **equation** with a **letter** such as x to represent an **unknown number**. Use the four operations to solve the problem. (OA.3)

Solutions to multi-step word problems can be checked to make sure they are reasonable. **Rounding** the numbers in the equation before solving will provide an **estimate** of the correct answer. (OA.3)

Place value is the numerical value of a digit in a number based on its location. A digit in the tens place of a number is 10 times the value of the same digit in the ones place. A digit in the hundreds place is 10 times the value of the same digit in the tens place. (NBT.1)

Numbers can be written in different forms using the place value of each digit.

- **Base ten numerals:** The number is written as a group of digits, 183.
- **Number names:** The number is written in words, one hundred eighty-three.
- **Expanded form:** The number is written as an addition equation of the place value for each digit, $100 + 80 + 3$. (NBT.2)

Compare: Determine the value of two numbers written in different forms to see which has a greater value.

- **Greater than:** If a number is larger in value, use the symbol $>$.
- **Less than:** If a number is smaller in value, use the symbol $<$.
- **Equal to:** If the numbers have the same value, use the symbol $=$. (NBT.2)

Rounding: A number can be rounded to the nearest number of a certain place value. For example, 295 can be rounded to the nearest hundred to get 300. (NBT.3)

Add and **subtract** whole numbers using place value to regroup as needed. When adding, a place value that has a sum of 10 or greater will need to regroup into the higher place value. When subtracting, find the difference between the first and second number. If a digit in the first number is smaller than the digit in the same place in the second number, regroup from a higher place value into a lower place value. (NBT.4)

Important Tips

- ✍ Use the place value of each digit when writing numbers from number names. Remember to keep in mind place value when writing numbers. For example, one thousand twenty-four is written as 1,024 with a 1 in the thousands place, 2 in the tens place, and 4 in the ones place.
- ✍ When using rounded numbers in an equation, the answer will be an estimate.

Sample Items 1–3

Item 1

The population of Pleasantville is 2,378.

What is the population of the city, rounded to the nearest hundred?

- A. 2,000
- B. 2,300
- C. 2,380
- D. 2,400

Item 2

Subtract.

$$2,406 - 157$$

- A. 2,249
- B. 2,259
- C. 2,349
- D. 2,351

Item 3

On Monday, workers at a toy factory made 529 teddy bears. On Tuesday, they made 207 teddy bears. On Wednesday, they made 174 teddy bears.

Part A: ABOUT how many teddy bears did the factory workers make in those three days?

The factory workers made ABOUT _____ teddy bears in three days.

Part B: Explain how you found the answer.

Part C: What is the exact number of teddy bears made in three days? The factory workers made EXACTLY _____ teddy bears in three days.

Part D: Explain how you know your estimate is a reasonable answer.

Unit 2: Multiplication and Division of Whole Numbers

In this unit, you will use multiplication, division, and word problems with more than one step. You will use the properties of operations. You will work with prime and composite numbers and patterns.

KEY TERMS

Multiplicative comparison: Comparing the value of one object to the value of another, using phrases such as “3 times as long.” (OA.1)

Solve word problems involving **multiplicative comparison** by creating a drawing or equation to represent the problem. A letter can be used in an equation for an unknown number. Use multiplication or division to solve for the unknown number. (OA.2)

Model **word problems** involving **more than one step** by writing an **equation** with a **letter** such as x to represent an **unknown number**. Use the four operations to solve the problem. (OA.3)

Division equations may include a **remainder**. Determine how the remainder should be used based on the information in the word problem. The remainder may be listed as part of the quotient or used to round the quotient up or down depending on the situation. (OA.3)

Use **place value** and **properties of operations** to multiply and divide whole numbers. Use models such as arrays, area models, and equations to illustrate the problem. (NBT.5, NBT.6)

Properties of Operations:

- **Commutative Property:** Numbers can be multiplied in any order and the **product** will stay the same.
- **Associative Property:** Three or more **factors** can be grouped together in any way and the **product** will stay the same.
- **Distributive Property:** The product of the sum of two numbers can be found by finding the product of each number, then taking the sum of those products. (NBT.5)

A number can be broken down into factors. The **factors** of a number are two whole numbers that when multiplied together equal the given number. Example: 4 and 2 are factors of 8; $4 \times 2 = 8$. (OA.4)




A **multiple** of a number is the product of that number and another factor. For example, 12 is a multiple of 3 because $3 \times 4 = 12$.

Prime: A number that can be broken down into factors of only 1 and itself. (OA.4)

Composite: A number that has more factors than 1 and itself. (OA.4)

Patterns: Repeated sequences of numbers or shapes that follow a set of **rules** such as “add 5.” (OA.5)

Important Tips

-  When listing multiples of a number, include the given number. The smallest multiple of a number is the number itself. For example, 5 is a multiple of 5 using the equation 5×1 .
-  The number of factors a number has is not related to the size of the number. A number with a greater value may not have a larger amount of factors.
-  Prime numbers only have factors of one and itself. Two is the smallest prime number. Composite numbers are numbers that have factors other than one or itself.

Sample Items 4–6

Item 4

35×43

- A. 245
- B. 1,295
- C. 1,305
- D. 1,505

Item 5

There are three times as many red crayons in the bucket as blue crayons. There are 8 blue crayons.

Which equation represents the number of red crayons?

- A. $16 \div 8 = 3$
- B. $8 - 3 = 5$
- C. $3 + 8 = 11$
- D. $3 \times 8 = 24$

Item 6

There are 60 books that need to be shipped to the bookstore. Each shipping box holds 8 books.

How many boxes are needed?

_____ boxes

Explain how you found the answer.

Unit 3: Fraction Equivalents

In this unit, you will work with fractions, including improper and equivalent fractions and mixed numbers. You will compare fractions and create common denominators and numerators.

KEY TERMS

Fraction: A number used to represent equal parts of a whole. (NF.1)

Fractions less than 1, with the numerator less than the denominator, are proper fractions.

Fractions greater than 1 are written as **improper fractions**, where the numerator is greater than the denominator, or as **mixed numbers**, which include a whole number and a fraction. (NF.1)

Equivalent fractions: Fractions that are the same size or the same point on the number line. (NF.1)

Equivalent fractions are created by **multiplying** the numerator and denominator by the same number, which is the same as multiplying the fraction by 1. For example, $\frac{(1 \times 4)}{(2 \times 4)} = \frac{4}{8}$ so $\frac{4}{8}$ is equivalent to $\frac{1}{2}$. The fraction now includes a different number of parts and the parts are different sizes, but the value remains the same. (NF.1)



Compare: Determine the value or size of two fractions to see which fraction is larger. Fractions can be compared by looking at the number of equal parts and the size of the equal parts of the same size whole.

- **Greater than:** If a fraction is larger in size and value, use the symbol $>$.
- **Less than:** If a fraction is smaller in size and value, use the symbol $<$.
- **Equal to:** If the fractions are the same size (equivalent fractions), use the symbol $=$. (NF.2)

Fractions with different numerators and denominators can be compared in two ways.

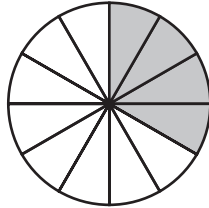
Using the same strategies for creating equivalent fractions, create a **common denominator** or **common numerator** between the two fractions. Or, both fractions can be compared to a **benchmark fraction** such as $\frac{1}{2}$. (NF.2)

Important Tips

-  When comparing fractions, use both the numerator and the denominator to find the value of the fraction. The numerator tells the number of parts out of the whole, and the denominator tells the size of each part.
-  Fractions in a comparison must represent parts of the same whole. When using models to compare fractions, use models that are the same size and shape.

Sample Items 7–9**Item 7**

Look at the model.



Which fraction is equivalent to the shaded part of this model?

- A. $\frac{1}{4}$
- B. $\frac{1}{3}$
- C. $\frac{1}{2}$
- D. $\frac{1}{6}$

Item 8

Look at the expression.

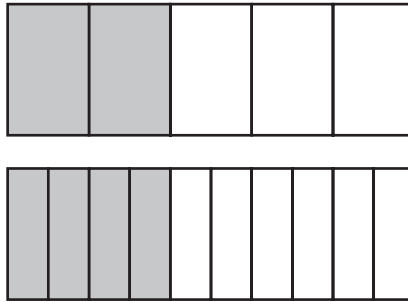
$$\square > \frac{1}{2}$$

Which fraction goes in the \square to make this expression TRUE?

- A. $\frac{1}{4}$
- B. $\frac{2}{3}$
- C. $\frac{2}{4}$
- D. $\frac{1}{3}$

Item 9

These models show two equivalent fractions.



Part A: Write the two equivalent fractions.

_____ = _____

Part B: Explain why the fractions are equivalent.

A large rectangular box containing 12 horizontal lines for writing.

Part C: Describe how you could model a third fraction that is equivalent to these two.

A large rectangular box containing 12 horizontal lines for writing.

Unit 4: Operations with Fractions

In this unit, you will add, subtract, and multiply fractions. You will continue to work with improper fractions and mixed numbers.

KEY TERMS

Proper fractions that have a numerator of 1 are called **unit fractions**.

Adding and **subtracting** fractions is joining or separating parts referring to the same whole.

Decompose a fraction by separating the given fraction into a sum of smaller fractions.

For example, $\frac{3}{5} = \frac{1}{5} + \frac{2}{5}$. (NF.3)

Before adding or subtracting fractions, find a **common denominator**. If the fractions in the equation have **unlike denominators**, replace each fraction with an **equivalent** fraction that has the same denominator. (NF.3)

After creating a like denominator, **add** the numerators to find the **sum** or **subtract** the numerators to find the **difference**. (NF.3)


Fractions greater than 1 can be written as **improper fractions**, where the numerator is larger than the denominator, or as **mixed numbers**, which include a whole number and a fraction. (NF.3)

A fraction is a **multiple** of a **unit fraction**. For example, $\frac{2}{3}$ is $2 \times \frac{1}{3}$. This strategy can be used to multiply a fraction by a whole number. (NF.4)

Multiplying a fraction by a whole number is the same as repeatedly adding the fraction.

If the equation asks for $\frac{1}{4} \times 3$, find the total sum of $\frac{1}{4}$ three times. **Word problems** can be represented using an equation or a fraction model. (NF.4)

Important Tip

 Fractions in an equation must represent parts of the same whole. When using models to solve the equations, use models that are the same size and shape.

Sample Items 10–12**Item 10**

Which equation is TRUE?

- A. $\frac{2}{5} = \frac{1}{2} + \frac{1}{3}$
- B. $\frac{3}{5} = \frac{1}{3} + \frac{1}{3} + \frac{1}{3}$
- C. $\frac{4}{5} = \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5}$
- D. $\frac{4}{5} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$

Item 11

Sarita has 3 rolls of ribbon. Each roll is 3 yards long. Sarita cuts off $\frac{1}{2}$ yard from each roll.

How much ribbon does she cut off in all?

- A. 1 yard
- B. $1\frac{1}{2}$ yards
- C. 3 yards
- D. $3\frac{1}{2}$ yards

Item 12

Ashad, Kate, and Maria wrote addition equations that have the sum $\frac{4}{5}$ as shown.

Ashad

$$\frac{4}{5} = \frac{1}{5} + \frac{1}{5} + \frac{1}{5}$$

Kate

$$\frac{4}{5} = \frac{2}{5} + \frac{1}{5} + \frac{1}{5}$$

Maria

$$\frac{4}{5} = \frac{1}{5} + \frac{3}{5} + \frac{1}{5}$$

Whose equation is correct? Explain how you know.

Unit 5: Fractions and Decimals

In this unit, you will add and subtract fractions. You will compare decimals and work with place value.

KEY TERMS

Add and subtract fractions with the denominators of 10 and 100 by creating a **common denominator**. (NF.5)

A **decimal** is another way to write a **fraction**. Both a decimal and fraction show a value that is between whole numbers. For example: $\frac{6}{10}$ or 0.6 is a value between the whole numbers of 0 and 1. (NF.6)

Place Value is the value of a digit in a number based on its location related to the decimal point. A digit in the tenths place of a number is 10 times the value of the same digit in the hundredths place. A digit in the tenths place is $\frac{1}{10}$ the value of the same digit in the ones place. (NF.6)

- **Tenths place:** This is the first place to the right of the decimal point. A decimal of 0.1 would have a value equivalent to $\frac{1}{10}$.
- **Hundredths place:** This is the second place to the right of the decimal point. A decimal of 0.01 would have a value equivalent to $\frac{1}{100}$. (NF.6)

A decimal such as 0.35 can be written as $\frac{35}{100}$ or $\frac{3}{10} + \frac{5}{100}$. (NF.6)

To **compare decimal numbers**, determine the value or size of two decimal numbers and identify the number that has a greater or equal value, if possible.

- **Greater than:** If the decimal number has a greater value than the other number in the comparison, use the symbol $>$.
- **Less than:** If the decimal number has a smaller value than the other number in the comparison, use the symbol $<$.
- **Equal to:** If both numbers in the comparison have the same value, use the symbol $=$. (NF.7)

Important Tips

- ✍ When comparing decimal numbers, look at the place value of each digit. The location of the digit determines its value.
- ✍ Fraction models and drawings can be used to compare decimals. Decimals can be changed into fractions with a denominator of 10 or 100 and then used to create the model.

Sample Items 13–15

Item 13

Which fraction is equivalent to $\frac{3}{10}$?

- A. $\frac{3}{100}$
- B. $\frac{6}{100}$
- C. $\frac{10}{100}$
- D. $\frac{30}{100}$

Item 14

Which decimal is equivalent to $\frac{43}{100}$?

- A. 0.043
- B. 0.43
- C. 4.3
- D. 43.00

Item 15

Compare these two decimals.

0.54 mile and 0.45 mile

Is 0.54 mile greater than, less than, or equal to 0.45 mile?

Explain how you determined your answer.

A large rectangular box with a black border, containing 18 horizontal lines for writing the explanation.

Unit 6: Geometry

In this unit, you will study two-dimensional figures and their properties. You will work with angles, parallel and perpendicular lines, points, lines, line segments, rays, and lines of symmetry.

KEY TERMS

Two-dimensional figures: A **plane figure** that is measured in two dimensions, such as a rectangle that is measured using length and width. (G.2)

The **properties** of two-dimensional figures include:



- **Angles:**
 - * **Acute:** An angle measure less than 90° .
 - * **Obtuse:** An angle measure greater than 90° .
 - * **Right:** An angle measure equal to 90° .
- **Parallel lines:** Two lines that are always an equal distance apart.
- **Perpendicular lines:** Two lines that intersect at a 90° angle.
- **Point:** A location represented by a dot.
- **Line:** A straight line that continues in each direction with no endpoints.
- **Line segment:** Part of a straight line that begins and ends at two specific points.
- **Ray:** A part of a straight line that continues in one direction and has one endpoint. (G.1)

These parts of geometric figures can be **drawn** on their own or included in a two-dimensional shape. **Identify** the properties within a given shape to place it in a category. (G.2)

Category: A group of two-dimensional figures that share at least one property. For example: All shapes with four sides belong to the category of quadrilateral. (G.2)

Line of symmetry: A line across a figure such that the figure can be folded along the line into matching parts. (G.3)

Important Tips

-  The measure of an angle is not impacted by the length of the lines that make up the angle. When comparing angles, use a protractor to measure the angles or visually compare the degrees of measure.
-  A right angle can be estimated using the corner of a piece of paper or book. These everyday objects are rectangles and therefore have four right angles.

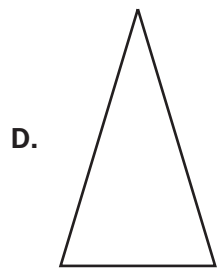
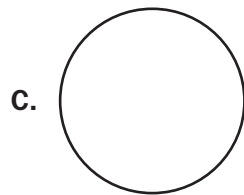
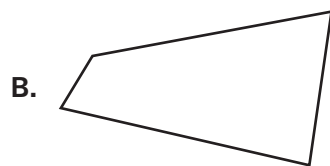
Sample Items 16–18**Item 16**

What type of lines meet at a 90° angle?

- A. curved
- B. diagonal
- C. parallel
- D. perpendicular

Item 17

Which figure has exactly one line of symmetry?



Item 18

Study the rectangle.



List four characteristics that help you classify this figure as a rectangle.

A large rectangular box containing 18 horizontal lines, intended for writing the characteristics of a rectangle.

Unit 7: Measurement

In this unit, you will work with different units of measurement, including time. You will record measurements on line plots and use protractors to measure angles. You will determine the area and perimeter of rectangles.

KEY TERMS

Conversion: Changing between units within the same measurement system. (MD.1)

Customary Measurement

- **Liquid volume** is measured in cups, pints, quarts, and gallons.
- **Length** is measured in inches, feet, yards, and miles.
- **Weight** is measured in ounces, pounds, and tons. (MD.1)

Metric Measurement

- **Liquid volume** is measured in milliliters and liters.
- **Length** is measured in centimeters, meters, and kilometers.
- **Mass** is measured in grams and kilograms. (MD.1)

Time is measured in seconds, minutes, and hours. (MD.1)

Use the **four operations** to solve **word problems** involving liquid volume, mass, intervals of time, and money within the same units of measure. If the units of measure are not the same, convert larger units into smaller units, such as feet into inches. These word problems may include decimals or fractions. (MD.2)

Use the length and width of a rectangle given in a problem to find the area and perimeter. **Area** can be found using the formula $A = l \times w$. **Perimeter** can be found using the formula $P = 2l + 2w$. (MD.3)



A **line plot** is used to record measurements for a group of objects. These measurements can include liquid volume, length, mass, and time. For example, a line is marked with measurements using fractions, including $\frac{1}{8}$, $\frac{1}{4}$, and $\frac{1}{2}$. Place a mark above the measurement on the line. Use the line plot to answer questions by adding or subtracting the measurements shown. (MD.4)

Angles are made by two rays that have the same endpoint. They are measured as part of a circle with the endpoint as the center. The measure of an angle is the part between the two rays. (MD.5)

Angles are measured in degrees using a protractor. (MD.6)

An angle can be divided into smaller angles that do not **overlap**. The measure of non-overlapping parts can be **added** together to find the measure of the whole angle. You can also find the measure of **unknown angles** by writing an equation with a letter for the unknown angle measure. (MD.7)

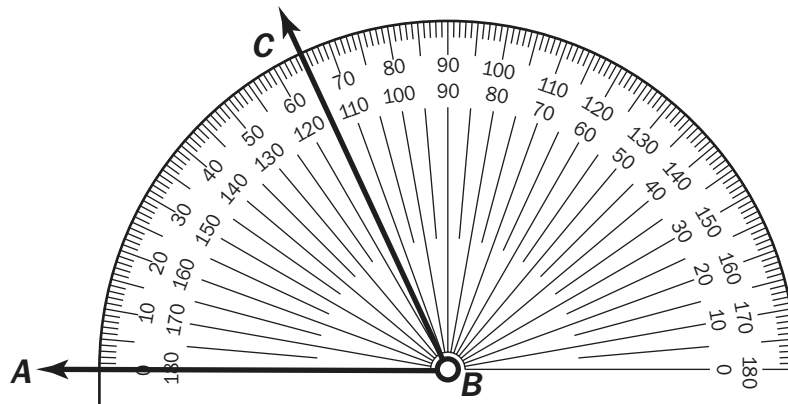
Important Tips

-  To convert a measurement such as yards, choose another unit used to measure length within the customary measurement system, such as feet or inches.
-  Estimate the size of an angle as greater than or less than 90° before measuring with a protractor. If the estimate of the angle is less than 90°, then use the smaller number listed on the protractor. If the estimate is greater than 90°, then use the larger number listed on the protractor.

Sample Items 19–21

Item 19

Consider the angle and protractor.



What is the measure of angle *ABC* to the nearest whole degree?

Angle *ABC* measures _____°.

Classify the angle as *acute*, *right*, or *obtuse*. Explain how you know.

Item 20

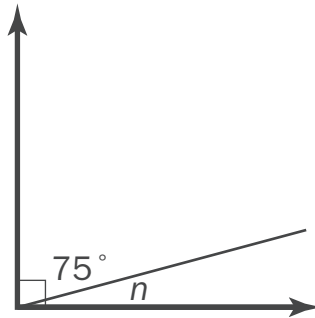
Ms. Johnson built a rectangular fence around her garden. The length of the fence is 8 feet. The width is 7 feet.

What is the perimeter of the fence?

- A. 15 feet
- B. 30 feet
- C. 56 feet
- D. 64 feet

Item 21

Look at the angle measures in the right angle.



What is the measure of the unknown angle, n ?

- A. 15°
- B. 25°
- C. 90°
- D. 180°

MATHEMATICS ADDITIONAL SAMPLE ITEM KEYS

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
1	MGSE4.NBT.3	2	D	The correct answer is choice (D) 2,400. To round to the nearest hundred, the value of the digit in the tens place is evaluated. If the digit in the tens place is greater than 5, the digit in the hundreds place rounds to the greater hundred. Choice (A) is incorrect because it is the result of rounding to the nearest thousand. Choice (B) is incorrect because it incorrectly shows rounding to the nearest hundred. Choice (C) is incorrect because it shows rounding to the nearest ten.
2	MGSE4.NBT.4	2	A	The correct answer is choice (A) 2,249. This subtraction problem requires regrouping with a zero. Choices (B) and (C) are incorrect because both were regrouped incorrectly. Choice (D) is incorrect because digits were subtracted without regrouping.
3	MGSE4.OA.3	2	N/A	See scoring rubric and sample response beginning on page 99.
4	MGSE4.NBT.5	2	D	The correct answer is choice (D) 1,505. This multi-digit multiplication problem requires regrouping. Choice (A) is incorrect because the place value of the digits was not calculated correctly. Choices (B) and (C) are incorrect because there were calculation errors.
5	MGSE4.OA.1	2	D	The correct answer is choice (D) $3 \times 8 = 24$. This word problem asks which equation represents the number of red crayons. This was best shown with the operation of multiplication. Choice (A) is incorrect because the product is incorrect. Choices (B) and (C) are incorrect because they use the wrong operations.
6	MGSE4.NBT.6	2	N/A	See scoring rubric and sample response beginning on page 102.
7	MGSE4.NF.1	1	B	The correct answer is choice (B) $\frac{1}{3}$. The circle is divided into 12 equal parts, and 4 of them are shaded. Four out of 12 is equivalent to $\frac{1}{3}$. Choice (A) is incorrect because it is equivalent to 3 out of 12 parts shaded. Choice (C) is incorrect because it is equivalent to 6 out of 12 parts shaded. Choice (D) is incorrect because it is equivalent to 2 out of 12 parts shaded.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
8	MGSE4.NF.2	1	B	The correct answer is choice (B) $\frac{2}{3}$. Rewriting both fractions with a common denominator gives $\frac{2}{3} = \frac{4}{6}$ and $\frac{1}{2} = \frac{3}{6}$. Since $\frac{4}{6} > \frac{3}{6}$, then $\frac{2}{3} > \frac{1}{2}$. Choice (A) is incorrect because $\frac{1}{4} < \frac{1}{2}$. Choice (C) is incorrect because $\frac{2}{4} = \frac{1}{2}$. Choice (D) is incorrect because $\frac{1}{3} < \frac{1}{2}$.
9	MGSE4.NF.1	3	N/A	See scoring rubric and sample response beginning on page 104.
10	MGSE4.NF.3a	2	C	The correct answer is choice (C) $\frac{4}{5} = \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5}$. $\frac{4}{5}$ can be made by joining 4 unit fractions of the same denominator. Choice (A) is incorrect because the sum of the unit fractions equals $\frac{5}{6}$, not $\frac{2}{5}$. Choice (B) is incorrect because the sum of the unit fractions equals $\frac{3}{3}$, not $\frac{3}{5}$. Choice (D) is incorrect because the sum of the unit fractions equals $\frac{5}{4}$, not $\frac{4}{5}$.
11	MGSE4.NF.4c	2	B	The correct answer is choice (B) $1\frac{1}{2}$ yards. This is the same as $\frac{1}{2} + \frac{1}{2} + \frac{1}{2}$, which equals $\frac{3}{2}$. Two pieces of ribbon that are $\frac{1}{2}$ yard equal 1 yard in total plus an additional $\frac{1}{2}$ yard. Choice (A) is incorrect because it is the total amount cut off only 2 rolls. Choice (C) is incorrect because it is the number of pieces of ribbon. Choice (D) is incorrect because it is the sum of two of the two numbers given in the problem.
12	MGSE4.NF.3b	2	N/A	See scoring rubric and sample response beginning on page 108.
13	MGSE4.NF.5	2	D	The correct answer is choice (D) $\frac{30}{100}$. $\frac{3}{10}$ has the same value as $\frac{30}{100}$ since 3 times 10 equals 30 and 10 times 10 equals 100. Choices (A), (B), and (C) are not equivalent fractions to $\frac{3}{10}$.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
14	MGSE4.NF.6	2	B	The correct answer is choice (B) 0.43. 0.43 means there are 43 hundredths; this is equivalent to $\frac{43}{100}$. Choice (A) is incorrect because 0.043 means 43 thousandths, or $\frac{43}{1000}$. Choice (C) is incorrect because 4.3 means 4 wholes and 3 tenths, or $4\frac{3}{10}$. Choice (D) is incorrect because 43.00 means 43 wholes.
15	MGSE4.NF.7	2	N/A	See scoring rubric and sample response beginning on page 110.
16	MGSE4.G.1	1	D	The correct answer is choice (D) perpendicular. Perpendicular lines intersect at a right angle, or 90 degrees. Choice (A) is incorrect because curved lines don't meet at an angle; an angle is formed by the intersection of two lines, segments, or rays. Choice (B) is incorrect because not all diagonal lines intersect. Choice (C) is incorrect because parallel lines are lines that will never intersect; they will always be the same distance apart from one another.
17	MGSE4.G.3	2	D	The correct answer is choice (D). An isosceles triangle has exactly one line of symmetry. Choice (A) is incorrect because a square has four lines of symmetry. Choice (B) is incorrect because the figure has no lines of symmetry. Choice (C) is incorrect because a circle has an infinite number of lines of symmetry.
18	MGSE4.G.2	3	N/A	See scoring rubric and sample response beginning on page 112.
19	MGSE4.MD.6	2	N/A	See scoring rubric and sample response beginning on page 114.
20	MGSE4.MD.3	2	B	The correct answer is choice (B) 30 feet. The perimeter is found by adding all side lengths of a figure. Choice (A) is incorrect because just two sides of the figure were added. Choice (C) is incorrect because it is the area, the space inside the figure. Choice (D) is incorrect because it is based on a calculation error when finding area.
21	MGSE4.MD.7	2	A	The correct answer is choice (A) 15°. The two smaller angles together form a right angle, so their sum must be 90°. Choice (B) is incorrect because a right angle does not measure 100°. Choice (C) is incorrect because 90° is the entire measurement of the right angle. Choice (D) is incorrect because it is the measurement of a straight line.

MATHEMATICS SAMPLE SCORING RUBRICS AND EXEMPLAR RESPONSES

Item 3

Scoring Rubric

Points	Description
4	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates a complete understanding of using estimation to solve a multi-digit addition problem with more than two addends. • Give 4 points for the correct answer/estimate and a complete, correct explanation of how the answer was calculated/estimated. <ul style="list-style-type: none"> • Response is correct and complete. • Response shows application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols as appropriate
3	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates a nearly complete understanding of using estimation to solve a multi-digit addition problem with more than two addends. • Give 3 points if the student response indicates 1 error in any of the 4 parts or 1 part is incomplete. <ul style="list-style-type: none"> • Response is mostly correct, but contains either a computation error or an unclear or incomplete explanation. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.
2	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates a partial understanding of using estimation to solve a multi-digit addition problem with more than two addends. • Give 2 points if student response indicates 2 errors in any of the 4 parts OR two parts are incomplete. <ul style="list-style-type: none"> • Response is only partially correct. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.

Points	Description
1	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates a minimal understanding of using estimation to solve a multi-digit addition problem with more than two addends. • Give 1 point if student response indicates 3 errors in any of the 4 parts OR all 3 parts are incomplete. <ul style="list-style-type: none"> • Response is only partially correct. • Response shows incomplete or inaccurate application of a relevant strategy. • Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.
0	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates limited to no understanding of using estimation to solve a multi-digit addition problem with more than two addends. <ul style="list-style-type: none"> • Response is incorrect. • Response shows no application of a strategy. • Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Exemplar Response

Points Awarded	Sample Response
4	<p>The factory workers made ABOUT 900 teddy bears in three days. AND To calculate the answer, I used rounding. I rounded each number to the nearest hundred and then added the estimates together. 500 and 200 and 200 equal 900 <i>OR other valid process</i> AND The factory workers made EXACTLY 910 teddy bears in three days. AND My estimate was a reasonable answer because my estimate, 900, and the exact answer, 910, are close. <i>Or other valid process.</i></p>

Points Awarded	Sample Response
3	<p>The factory workers made ABOUT 900 teddy bears in three days.</p> <p>AND</p> <p>To calculate the answer, I used rounding. I rounded each number to the nearest hundred and then added the estimates together.</p> <p>500 and 200 and 200 equal 900</p> <p><i>OR other valid process</i></p> <p>AND</p> <p>The factory workers made EXACTLY 910 teddy bears in three days.</p> <p>AND</p> <p>My estimate was not reasonable answer because my estimate, 900, and the exact answer, 910, <i>were not the same.</i></p>
2	<p>The factory workers made ABOUT 900 teddy bears in three days.</p> <p>AND</p> <p>To calculate the answer, I used rounding. I rounded each number to the nearest hundred and then added the estimates together.</p> <p>500 and 200 and 200 equal 900</p> <p><i>OR other valid process</i></p> <p>AND</p> <p>The factory workers made EXACTLY 890 teddy bears in three days.</p> <p>AND</p> <p>My estimate was not reasonable answer because my estimate, 900, and the exact answer, 910, <i>were not the same.</i></p>
1	<p>The factory workers made ABOUT 900 teddy bears in three days.</p> <p>AND</p> <p>To calculate the answer, I used rounding. I rounded each number to the nearest ten and then added the estimates together.</p> <p>AND</p> <p>The factory workers made EXACTLY 890 teddy bears in three days.</p> <p>AND</p> <p>My estimate was not reasonable answer because my estimate, 900, and the exact answer, 910, <i>were not the same.</i></p>
0	<p><i>Response is irrelevant, inappropriate, or not provided.</i></p>

Item 6

Scoring Rubric

Points	Description
2	<p>The response achieves the following:</p> <ul style="list-style-type: none">• The response demonstrates a complete understanding of division and remainders.• Give 2 points for the correct answer/estimate and a complete, correct explanation of how the answer was calculated/estimated.<ul style="list-style-type: none">• Response is correct and complete.• Response shows application of a reasonable and relevant strategy.• Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols as appropriate.
1	<p>The response achieves the following:</p> <ul style="list-style-type: none">• The response demonstrates a partial understanding of division and remainders.• Give 1 point for the correct answer but no process shown OR a correct process with a calculation error.<ul style="list-style-type: none">• Response is mostly correct, but contains either a computation error or an unclear or incomplete explanation.• Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained.• Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.
0	<p>The response achieves the following:</p> <ul style="list-style-type: none">• The response demonstrates limited to no understanding of division and remainders.<ul style="list-style-type: none">• Response is incorrect.• Response shows no application of a strategy.• Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Exemplar Response

Points Awarded	Sample Response
2	<p>8 boxes are needed.</p> <p>AND</p> <p>To calculate, I used division: 60 divided by 8. The answer is 7 with a remainder of 4. That means that 7 boxes will be completely filled with 8 books in each box, and there will be 4 books left over. Since all 60 books need to be shipped, the remaining books will need to go in an eighth box that will not be completely full.</p> <p><i>OR other valid process</i></p>
1	<p>8 boxes are needed.</p> <p>OR</p> <p>7 boxes are needed. To calculate, I used division: 60 divided by 8. The answer is 6 with a remainder of 4. That means that 6 boxes will be completely filled with 8 books in each box, and there will be 4 books left over. Since all 60 books need to be shipped, the remaining books will need to go in a seventh box that will not be completely full.</p> <p><i>OR other valid process</i></p>
0	<p><i>Response is irrelevant, inappropriate, or not provided.</i></p>

Item 9

Scoring Rubric

Points	Description
4	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates a complete understanding of equivalent fractions. • Give 4 points if student response identifies 2 equivalent fractions AND correctly describes a model of a third equivalent fraction AND provides a clear understanding of why the fractions are equivalent. <ul style="list-style-type: none"> • Response is correct and complete. • Response shows application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols as appropriate.
3	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates a nearly complete understanding of equivalent fractions. • Give 3 points if student response indicates 1 error in any of the 3 parts OR 1 part is incomplete. <ul style="list-style-type: none"> • Response is mostly correct, but contains either a computation error or an unclear or incomplete explanation. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.
2	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates a partial understanding of equivalent fractions. • Give 2 points if student response indicates 2 errors in any of the 3 parts OR 2 parts are incomplete. <ul style="list-style-type: none"> • Response is only partially correct. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.

Points	Description
1	<p>The response achieves the following:</p> <ul style="list-style-type: none">• The response demonstrates a minimal understanding of equivalent fractions.• Give 1 point if student response indicates 3 errors in any of the 3 parts OR all 3 parts are incomplete.<ul style="list-style-type: none">• Response is only partially correct.• Response shows incomplete or inaccurate application of a relevant strategy.• Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.
0	<p>The response achieves the following:</p> <ul style="list-style-type: none">• The response demonstrates limited to no understanding of equivalent fractions.<ul style="list-style-type: none">• Response is incorrect.• Response shows no application of a strategy.• Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Exemplar Response

Points Awarded	Sample Response
4	$\frac{2}{5} = \frac{4}{10}$ <p><i>OR other equivalent fractions</i></p> <p>AND</p> <p>Equivalent fractions mean equal fractions. Even if the numbers in the numerator and denominator are different, two fractions can be equivalent because they represent the same value. The whole has to be the same size; otherwise you can't compare the fractions. When you divide a whole into smaller parts, the parts are smaller.</p> <p><i>OR other valid process or explanation</i></p> <p>AND</p> <p>Start with a rectangle that is the same size as the models. Divide the rectangle into 100 equal parts and shade 40 parts.</p> <p><i>OR other valid equivalent fraction or description</i></p>
3	$\frac{2}{5} = \frac{4}{10}$ <p><i>OR other equivalent fractions</i></p> <p>AND</p> <p>Equivalent fractions mean equal fractions. Even if the numbers in the numerator and denominator are different, two fractions can be equivalent because they represent the same value. The whole has to be the same size; otherwise you can't compare the fractions.</p> <p><i>OR other valid process or explanation</i></p> <p>AND</p> <p>Start with a rectangle that is the same size as the models. Divide the rectangle into 2 equal parts and shade 1 part.</p>
2	$\frac{2}{5} = \frac{4}{5}$ <p><i>OR other equivalent fractions</i></p> <p>AND</p> <p>Equivalent fractions mean equal fractions. Even if the numbers in the numerator and denominator are different, two fractions can be equivalent because they represent the same value. The whole has to be the same size; otherwise you can't compare the fractions.</p> <p><i>OR other valid process or explanation</i></p> <p>AND</p> <p>Start with a rectangle that is the same size as the models. Divide the rectangle into 2 equal parts and shade 1 part.</p>

Points Awarded	Sample Response
1	$\frac{2}{5} = \frac{4}{5}$ <i>OR other equivalent fractions</i> AND Equivalent fractions mean equal fractions. <i>OR other valid process or explanation</i> AND Start with a rectangle that is the same size as the models. Divide the rectangle into 2 equal parts and shade 1 part.
0	<i>Response is irrelevant, inappropriate, or not provided.</i>

Item 12

Scoring Rubric

Points	Description
2	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates a complete understanding of decomposing a sum of fractions. • Give 2 points for a response that identifies the correct equation and accurately explains why the decomposition is correct. <ul style="list-style-type: none"> • Response is correct and complete. • Response shows application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols as appropriate.
1	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates a partial understanding of decomposing a sum of fractions. • Give 1 point for a response that identifies the correct equation but has an incorrect explanation or no explanation. <ul style="list-style-type: none"> • Response is mostly correct, but contains either a computation error or an unclear or incomplete explanation. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.
0	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates limited to no understanding of decomposing a sum of fractions. <ul style="list-style-type: none"> • Response is incorrect. • Response shows no application of a strategy. • Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Exemplar Response

Points Awarded	Sample Response
2	Kate's equation is correct. All the fractions have the same denominator, so you just have to add the numerators to get the sum. Kate added numerators 2, 1, and 1, so the numerator in her fraction is 4. <i>OR other valid explanation</i>
1	Kate's equation is correct. <i>OR provides an invalid explanation.</i>
0	<i>Response is irrelevant, inappropriate, or not provided.</i>

Item 15

Scoring Rubric

Points	Description
2	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates a complete understanding of comparing decimals to the hundredths. • Give 2 points for a correct answer and a complete, correct explanation of how the decimals were compared. <ul style="list-style-type: none"> • Response is correct and complete. • Response shows application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols as appropriate.
1	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates a partial understanding of comparing decimals to the hundredths. • Give 1 point for choosing the correct answer for comparing the two decimals or a correct model to show how to compare the two decimals. <ul style="list-style-type: none"> • Response is mostly correct, but contains either a computation error or an unclear or incomplete explanation. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.
0	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates limited to no understanding of comparing decimals to the hundredths. <ul style="list-style-type: none"> • Response is incorrect. • Response shows no application of a strategy. • Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Exemplar Response

Points Awarded	Sample Response
2	greater than AND I compared the two decimals by using hundredths grids. I shaded in 54 of the 100 squares to show the first decimal. It is made up of 5 tenths and 4 hundredths. I shaded in 45 of the 100 squares to show the second decimal. It is made up of 4 tenths and 5 hundredths. The first decimal is the greater decimal. <i>OR other valid explanation</i>
1	greater than
0	<i>Response is irrelevant, inappropriate, or not provided.</i>

Item 18

Scoring Rubric

Points	Description
4	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates a complete understanding of classifying a two-dimensional figure by its characteristics. • Give 4 points if student response indicates four correct characteristics AND provides clear explanation/description/diagram of each characteristic. <ul style="list-style-type: none"> • Response is correct and complete. • Response shows application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols as appropriate.
3	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates a nearly complete understanding of classifying a two-dimensional figure by its characteristics. • Give 3 points if student response indicates three correct characteristics AND provides a clear explanation/description/diagram of each characteristic. <ul style="list-style-type: none"> • Response is mostly correct, but contains either a computation error or an unclear or incomplete explanation. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.
2	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates a partial understanding of classifying a two-dimensional figure by its characteristics. • Give 2 points if student response indicates two correct characteristics with explanation/description/diagram of each characteristic OR three correct examples with minimal explanation/description/diagram of each characteristic. <ul style="list-style-type: none"> • Response is only partially correct. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.

Points	Description
1	<p>The response achieves the following:</p> <ul style="list-style-type: none"> The response demonstrates a minimal understanding of classifying a two-dimensional figure by its characteristics. Give 1 point if student response indicates at least one correct characteristic with explanation/description/diagram of each characteristic. <ul style="list-style-type: none"> Response is only partially correct. Response shows incomplete or inaccurate application of a relevant strategy. Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.
0	<p>The response achieves the following:</p> <ul style="list-style-type: none"> The response demonstrates limited to no understanding of classifying a two-dimensional figure by its characteristics. <ul style="list-style-type: none"> Response is incorrect. Response shows no application of a strategy. Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Exemplar Response

Points Awarded	Sample Response
4	<p>Characteristic 1: It has four sides. Characteristic 2: It has four right angles. Characteristic 3: Its opposite sides are parallel. Characteristic 4: Its opposite sides have the same length. <i>OR other valid characteristics</i></p>
3	<p>Characteristic 1: It has four sides. Characteristic 2: It has four right angles. Characteristic 3: Its opposite sides are parallel. <i>OR other valid characteristics</i></p>
2	<p>Characteristic 1: It has four sides. Characteristic 2: It has four right angles. <i>OR other valid characteristics</i></p>
1	<p>Characteristic 1: It has four sides. <i>OR other valid characteristics</i></p>
0	<p><i>Response is irrelevant, inappropriate, or not provided.</i></p>

Item 19

Scoring Rubric

Points	Description
2	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • Response demonstrates a complete understanding of measuring an angle using a protractor and identifying types of angles. • Give 2 points for correctly identifying the angle measurement AND correctly identifying the type of angle. <ul style="list-style-type: none"> • Response is correct and complete. • Response shows application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols as appropriate.
1	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • Response demonstrates a partial understanding of measuring an angle using a protractor and identifying types of angles. • Give 1 point for correctly identifying the angle measurement OR correctly identifying the type of angle. <ul style="list-style-type: none"> • Response is mostly correct, but contains either a computation error or an unclear or incomplete explanation. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.
0	<p>The response achieves the following:</p> <ul style="list-style-type: none"> • The response demonstrates limited to no understanding of measuring an angle using a protractor and identifying types of angles. <ul style="list-style-type: none"> • Response is incorrect. • Response shows no application of a strategy. • Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Exemplar Response

Points Awarded	Sample Response
2	65 AND The angle is an acute angle because it measures less than 90 degrees. <i>OR other valid explanation</i>
1	65 OR The angle is an acute angle because it measures less than 90 degrees. <i>OR other valid explanation</i>
0	<i>Response is irrelevant, inappropriate, or not provided.</i>

ACTIVITY

The following activities develop skills in Unit 2: Multiplication and Division of Whole Numbers.

Standards: MGSE4.OA.1, MGSE4.OA.2, MGSE4.OA.3, MGSE4.OA.4, MGSE4.OA.5, MGSE4.NBT.5, MGSE4.NBT.6

Complete the following activities with a partner.

Activity 1: Use place-value blocks to model three-digit whole numbers. Your partner should decompose the number in at least three different ways.

Example:

$$\begin{aligned} 317 &= 3 \text{ hundreds} + 1 \text{ ten} + 7 \text{ ones} = 300 + 10 + 7 \\ &= 3 \text{ hundreds} + 17 \text{ ones} = 300 + 17 \\ &= 2 \text{ hundreds} + 11 \text{ tens} + 7 \text{ ones} = 200 + 110 + 7 \end{aligned}$$

Switch roles and repeat so that each partner models at least five numbers.

Activity 2: Make a place-value chart that extends to millions. Write a whole number with 5 to 7 digits in the chart. Your partner should read the number aloud and write it in word form. Switch roles and repeat so that each partner writes at least five numbers.

Activity 3: Make a multiplication chart for whole numbers 0 to 10. Say a multiplication or division fact problem. Your partner should show how to use the chart to find the product or quotient. Switch roles and repeat so that each partner solves at least five multiplication or division problems. Then work together to find and describe at least five patterns in the chart.

ACTIVITY

The following activities develop skills in Unit 7: Measurement.

Standards: MGSE4.MD.1, MGSE4.MD.2, MGSE4.MD.3, MGSE4.MD.4, MGSE4.MD.5, MGSE4.MD.6, MGSE4.MD.7

Complete the following activities with a partner.

Activity 1: Use tools such as balances, scales, meter sticks, yardsticks, rulers, analog and digital clocks, and containers marked with cups, ounces, and liters to practice measuring objects or liquids in different units.

Activity 2: Make two conversion charts—one with customary units and one with metric units. Each chart should give rules for converting between at least 10 pairs of units in each system. Then choose one rule from each chart. Use each rule to record measurement equivalents in a two-column table. Then list each pair of equivalent measures as a number pair. For example, if you choose the rule for converting feet to inches, your number pairs might be (1, 12), (2, 24), (3, 36), etc.

Activity 3: Write at least five word problems that involve distances, intervals of time, liquid volumes, masses of objects, and money that can be solved using the four operations. At least two of the problems should involve simple fractions or decimals. Trade problems with another person and solve the problems you receive. Use diagrams in your solutions, when possible.

Activity 4: Search newspapers, magazines, or the Internet for articles or websites that mention measurements. For each example, identify what is measured and what unit is used. Explain why you think that unit was chosen. Then create a chart called “Measurements in Real Life” that shows real-world benchmarks for different types of measurements and units.

SCIENCE

DESCRIPTION OF TEST FORMAT AND ORGANIZATION

The Grade 4 Science EOG assessment has a total of 75 selected-response (multiple-choice) items.

The test will be given in two sections.

- You may have up to 70 minutes per section to complete Sections 1 and 2.
- The total estimated testing time for the Grade 4 Science EOG assessment ranges from approximately 90 to 140 minutes.

CONTENT

The Grade 4 Science EOG assessment will measure the Grade 4 Science standards that are described at www.georgiastandards.org. The science items also relate to a Characteristics of Science standard. Because science consists of a way of thinking and investigating and includes a growing body of knowledge about the natural world, you will need to understand both the **Characteristics of Science** standards and the **Content** standards for Science. The Characteristics of Science standards can also be found at www.georgiastandards.org.

The content of the assessment covers standards that are reported under these domains:

- Earth Science
- Physical Science
- Life Science

ITEM TYPES

The Science portion of the Grade 4 EOG assessment consists of selected-response (multiple-choice) items only.

SCIENCE DEPTH OF KNOWLEDGE EXAMPLE ITEMS

Example items that represent applicable DOK levels are provided for you on the following pages. The items and explanations of what is expected of you to answer them will help you prepare for the test.

All example and sample items contained in this guide are the property of the Georgia Department of Education.

Example Item 1

DOK Level 1: This is a DOK level 1 item because the question requires the student to recall information concerning a known relationship between scientific quantities.

Science Grade 4 Content Domain: Earth Science

Standard: S4E3. Students will differentiate between the states of water and how they relate to the water cycle and weather. b. Identify the temperatures at which water becomes a solid and at which water becomes a gas.

Standard: S4CS4. Students will use ideas of system, model, change, and scale in exploring scientific and technological matters. a. Observe and describe how parts influence one another in things with many parts.

At which temperature does pure water boil?

- A. 0°C
- B. 50°C
- C. 100°C
- D. 150°C

Correct Answer: C

Explanation of Correct Answer: The correct answer is choice (C) 100°C. Water begins to boil at 100°C. As water boils, steam escapes as a gas. Choice (A) is incorrect because water freezes, or turns into a solid, at 0°C. Choices (B) and (D) are incorrect because water does not boil at these temperatures.

Example Item 2

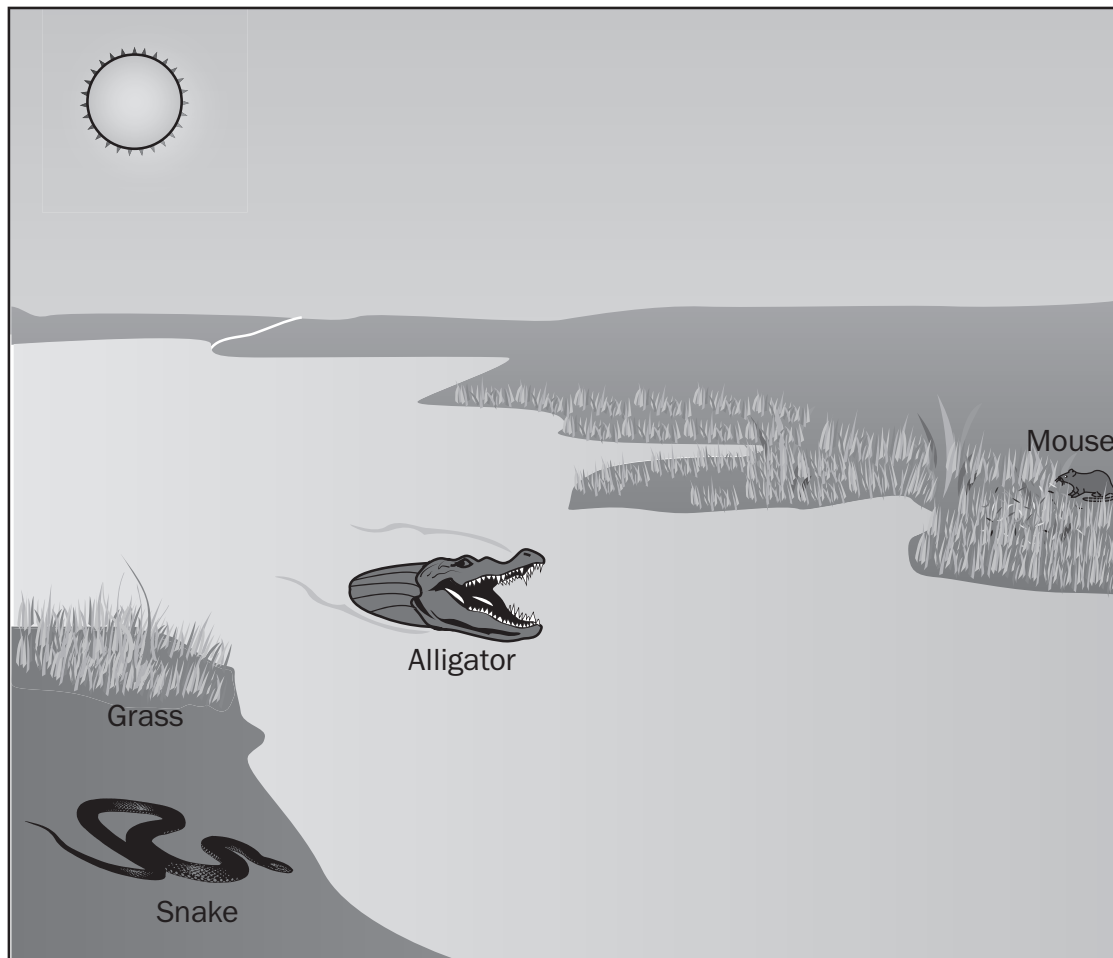
DOK Level 2: This is a DOK level 2 item because the question requires the student to apply learned information to abstract and real-life situations.

Science Grade 4 Content Domain: Life Science

Standard: S4L1. Students will describe the roles of organisms and the flow of energy within an ecosystem. b. Demonstrate the flow of energy through a food web/chain beginning with sunlight and including producers, consumers, and decomposers.

Standard: S4CS4. Students will use ideas of system, model, change, and scale in exploring scientific and technological matters. a. Observe and describe how parts influence one another in things with many parts.

This is a food web that can be found in a wetland habitat.



Which of these shows the correct flow of energy through the food chain?

- A. Sun → mouse → grass → alligator → snake
- B. Sun → grass → mouse → snake → alligator
- C. Sun → alligator → snake → mouse → grass
- D. Sun → grass → snake → mouse → alligator

Correct Answer: B

Explanation of Correct Answer: The correct answer is choice (B) Sun → grass → mouse → snake → alligator. The Sun sends energy to Earth. The producers, such as grass, use the energy from sunlight to make food. The producers are eaten by consumers, such as mice. Mice are eaten by consumers, such as snakes. Snakes are eaten by consumers, such as alligators. Choice (A) is incorrect because grass, and not the mouse, should come after the Sun. Choice (C) is incorrect because grass then mouse should come after the Sun, and the alligator should come at the end. Choice (D) is incorrect because the snake should consume the mouse.

Example Item 3

DOK Level 3: This is a DOK level 3 item because the question requires the student to make choices based on a reasoned argument.

Science Grade 4 Content Domain: Physical Science

Standard: S3P1. Students will investigate the nature of light using tools such as mirrors, lenses, and prisms. a. Identify materials that are transparent, opaque, and translucent.

Standard: S4CS1. Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works. c. Offer reasons for findings and consider reasons suggested by others.

One student holds up a piece of paper with an apple behind it. Another student shines a flashlight on the apple so that the flashlight, apple, and paper are in a straight line. A third student observes the paper. She is able to see the outline of the apple behind the piece of paper. Next, the students try the same experiment using a book, instead of paper.

What will MOST LIKELY happen when the light hits the book?

- A. The student will not see the apple because the book is opaque.
- B. The student will not see the apple because the apple is opaque.
- C. The student will see the apple because the apple is translucent.
- D. The student will clearly see the apple because the book is transparent.

Correct Answer: A

Explanation of Correct Answer: The correct answer is choice (A) The student will not see the apple because the book is opaque. When something is opaque, it does not allow light to pass through it. Choices (B) and (C) are incorrect because what is being tested is how well light passes through the book, not the apple. Choice (D) is incorrect because the book is not transparent. It does not let light pass through.

SCIENCE CONTENT DESCRIPTION AND ADDITIONAL SAMPLE ITEMS

In this section, you will find information about what to study in order to prepare for the Grade 4 Science EOG assessment. This includes main ideas and important vocabulary words. This section also contains practice questions, with an explanation of the correct answers, and activities that you can do with your classmates or family to prepare for the test.

All example and sample items contained in this guide are the property of the Georgia Department of Education.

CONTENT DESCRIPTION

- Construct meaningful models to study ecosystems
- Describe the flow of energy within an ecosystem
- Predict how changes in the environment or populations of organisms would affect the ecosystem
- Identify factors that affect the survival or extinction of organisms
- Understand how weather relates to the stages of the water cycle
- Use weather maps and charts to predict weather patterns
- Distinguish between weather and climate
- Investigate the stars, star patterns, and the Solar System
- Explain the changes in appearance of the Moon and the causes of seasonal changes
- Examine sound and light and how they interact with the environment
- Explain the changes in position and speed of an object in terms of forces
- Identify simple machines and explain their uses
- Describe the effect of the gravitational force in the motion of an object

CHARACTERISTICS OF SCIENCE STANDARDS

- Test a hypothesis, keep records, use safety procedures, use appropriate tools and instruments
- Apply computational and estimation skills for analyzing data
- Use technology for observing, measuring, and manipulating objects
- Be familiar with and utilize safe laboratory procedures
- Analyze data, interpret results, and communicate information
- Understand how science knowledge grows and changes
- Differentiate between observations and ideas, and speculate about observations
- List common materials for making simple mechanical constructions and repairs
- Use records, tables, or graphs to identify patterns of change
- Write instructions and make sketches to carry out scientific procedures

Unit 1: Ecology

In this unit, you will learn about the organisms and communities living in ecosystems. You will study the relationship between producers, consumers, and decomposers, as well as the relationships between predators and prey. You will learn about how energy flows in an ecosystem by examining food webs and food chains.

KEY TERMS

An **organism** is a living being. You are a living being. A tree is a living being. Most organisms move, eat, breathe, grow, reproduce, and respond to their environment. Not all organisms do all these things. For example, you move but trees cannot move. (S4L1)

A **community** is made by all the different kinds of organisms that live in an area. A community with many different kinds of living organisms is thought to be able to handle changes to the area better. (S4L1a)

When people refer to an **ecosystem**, they talk about the community of living and nonliving things that make up a system in an environment. A pond with plants, fishes, and decomposers in it located on a mountain is an example of an ecosystem. (S4L1)

A **habitat** is the type of area an organism lives in. A habitat has four parts that an organism needs: shelter, water, food, and space. (S4L1c)

Producers are organisms that make their own food using sunlight or other chemical processes and that use some of the food they make for their own energy. Plants are producers. (S4L1a)

Consumers are organisms that cannot make their own food. They eat producers and other consumers to get energy. Lions, fish, and birds are examples of consumers. (S4L1a)

Decomposers are organisms that break down dead and dying organisms. Decomposers get their energy from dead and dying consumers and producers. Examples of decomposers are worms, bacteria, and mushrooms. (S4L1a)

Food chains show how different organisms obtain the matter and energy they need. A food chain contains producers, consumers, and decomposers. Grass → rabbit → bear is an example of a food chain. The arrows show the way energy moves. Some of the energy in the grass moves to the rabbit when it eats the grass. Some of the energy in the rabbit moves to the bear when it eats the rabbit. (S4L1b)

A **food web** is all the food chains in an ecosystem. It looks like a web because it shows how all the different organisms in all the combined food chains interact. The only thing in a food web that is not an organism is the Sun. (S4L1b)

A **predator** is an animal that hunts other animals to get its energy. Some predators eat only animals that are alive. Other predators will eat animals that are alive or dead. Predators can be as small as insects. Predators can be as big as whales. (S4L1b)

A **prey** is an animal that is hunted by a predator. Prey can be the smallest insects that are eaten by birds. Prey can also be large animals like elephants. (S4L1b)

An **herbivore** is an animal that eats only plants to get energy. Geese, rabbits, and horses are examples of herbivores. (S4L1b)

A **carnivore** is an animal that eats only other animals to get energy. Spiders, foxes, and mountain lions are examples of carnivores. (S4L1b)

An **omnivore** is an animal that eats plants and animals to get energy. Ants, turtles, and bears are examples of omnivores. (S4L1b)

A **population** is all the organisms of the same species that live in the same area. All the black bears that live in a mountain range are a population. All the raccoons that live in a swamp are a population. (S4L1)

Scarcity means that there is less of something. When there isn't rain for a long time, there is a scarcity of water. (S4L1d)

When the population of an area is scarce, it is said to be **under-populated**. This means that there is less of an organism in an area. An ecosystem that is under-populated with rabbits means the bears will need to find other animals to eat.

When an area has too many of one kind of an animal, it is said to be **over-populated**. The area they live in will not have enough resources for the animals. The animals may need to move to new areas to find food, water, and shelter. (S4L1d)

All ecosystems have a **balance**. This means there are enough resources for the populations of plants and animals that live in the ecosystem. If there is too little of a resource, the plants and animals that need that resource will have problems. The plants in an area that does not get enough water will stop growing. The animals that eat those plants will not have enough food. If there is too much of a resource, there are also problems. If there is too much water, the plants might die. The animals that eat those plants will need to find something else to eat. (S4L1d)

An **adaptation** is a **feature** of a plant or an animal. Adaptations help animal and plant populations survive in an environment. An adaptation can be a body feature or a way of doing something. Camels are adapted to survive in a desert. They have humps that store water and fat for energy. (S4L2a)

Camouflage is an adaptation of plants and animals that increases their chances of survival. Camouflage is the way an animal's or a plant's colors can blend in with the environment. Because they can remain undetected, they can survive. A lion is the same color as the grass it hunts in. This makes it easier for the lion to catch prey to eat. A green insect can hide on a green plant. (S4L2a)



Mimicry is an adaptation that also increases the animal's or plant's chances of survival. Mimicry is the way an animal or a plant can look like another animal or plant. Some insects look like sticks and leaves. This helps the insects hide from the animals that eat them. (S4L2a)

Hibernation is an adaptation. Hibernation is the way a body slows down to use less energy. When an animal hibernates, its temperature goes down and its heart beats less. In the winter, bears hibernate to survive through the cold winter. (S4L2a)

A species is said to be **endangered** when the number of that animal around the world is low. Endangered species are under-populated in all ecosystems. Every living thing helps balance ecosystems. When a living thing is no longer around to help balance the ecosystem, the ecosystem is harmed. Human activity is the reason most animals become endangered. Tigers and elephants are endangered because humans hunted too many. Gorillas and chimpanzees are endangered because humans cut down too many of the trees they lived in. (S4L2b)

A species that has no more members alive on Earth is said to be **extinct**. If the population of an endangered species does not increase, it may decrease. If the population decreases to zero, the species has become extinct. Dinosaurs are extinct because they are not found on Earth anymore. The Tasmanian tiger of Australia was a mammal the size of a wolf that was hunted into extinction. The last one seen alive died in 1936. (S4L2b)

Important Tips

-  If part of a habitat changes, the animals that live there may need to move. When the trees in a forest are all cut down, the squirrels and other animals that live there will need to move to a new home. Some animals are better at moving to a new habitat. Black bears are known for living in many different habitats. (S4L1c)
-  Animals are fit to live in their habitats. This means they have qualities that help them live in the habitat. An animal that lives in one type of habitat may or may not be able to live in a different habitat. A black bear can live in a mountain or a plateau habitat. Some animals may not be able to live in a different habitat. A black bear can live in a swamp but would have trouble moving around the wet ground. (S4L2a)

Sample Items 1–4

Item 1

White-tailed deer are found throughout Georgia. Deer eat different plants, nuts, and fruits, such as grasses, acorns, and apples.

What role do deer play in their environment?

- A. consumer
- B. decomposer
- C. predator
- D. producer

Item 2

Swamp rabbits feed on grasses and other plants in swamps. Bobcats feed on swamp rabbits. Land development removes many of the grasses and plants eaten by the swamp rabbits.

How would this change MOST LIKELY affect the animals in this community?

- A. The rabbits would compete with the bobcats for food.
- B. The bobcats would not be affected because they do not eat plants.
- C. The rabbits would have less food because the bobcats would leave.
- D. The bobcats would have less food because there would be fewer rabbits.

Item 3

The Eastern box turtle is found throughout Georgia. Some of its predators include raccoons, skunks, coyotes, and foxes.

Which adaptation BEST protects the turtle against predators?

- A. tough skin
- B. webbed toes
- C. hard outer shell
- D. slow movement

Item 4

The Tasmanian tiger lived in wetlands, grasslands, and forests in Australia. It was about five feet long with light brown fur and stripes on its back. It was a type of mammal with a pouch for carrying its young. Farmers hunted the Tasmanian tiger to protect their livestock.

Which statement helps explain why the Tasmanian tiger became extinct?

- A. It was a type of mammal with a pouch for carrying its young.
- B. Farmers hunted the Tasmanian tiger to protect their livestock.
- C. It was about five feet long with light brown fur and stripes on its back.
- D. The Tasmanian tiger lived in wetlands, grasslands, and forests in Australia.

Unit 2: Weather

In this unit, you will learn about weather. Some of the topics covered will be the different states of water, how clouds form, and the process known as the water cycle. You will learn about weather maps and the tools that are used to observe and record the weather.

KEY TERMS

Water is a **liquid**. Liquids take up a definite volume but do not have a fixed shape. You can pour water into glasses of different shapes and it will take the shape of each glass. (S4E3a)

When water is ice, it is a **solid**. Solids have a definite volume and shape. Their volume and shape cannot be easily changed. Water that is colder than 32°F (32 degrees Fahrenheit) or 0°C (0 degrees Celsius) turns into solid ice. (S4E3a, b)

When water is a **gas** it is called a vapor. Gases have no definite volume and take the shape of their container. Liquid water turns into steam at 212°F or 100°C. (S4E3a, b)

The **water cycle** is the process that moves water above, below, and around Earth in a cycle. The water cycle has four main stages: evaporation, condensation, precipitation, and collection. **Evaporation** happens when the Sun heats up liquid water and causes it to evaporate. The water vapor, which is a gas, then rises up into the atmosphere. Water vapor forms clouds as it cools. This cooling is known as **condensation**. The clouds then release the water as **precipitation**, in the form of rain, snow, sleet and freezing rain, and hail. As the water runs off, it is collected into the ground and bodies of water. The Sun then heats the liquid water up, causing it to evaporate, and the water cycle starts all over again. (S4E3d)

Clouds form when moist, warm air cools and expands. The water vapor in the air condenses to form small water droplets. Once the air reaches a point of saturation (a point at which there is too much water vapor in the air), clouds begin to form. Small particles of dust in the atmosphere help this process of condensation as water droplets congregate around them. (S4E3c)

Rain is liquid water that falls from the sky as drops. The water vapor in a cloud condenses and turns into liquid water in the form of rain. (S4E3e)

Snow is solid water that falls from the sky. It can take many forms depending on the temperature and humidity in the atmosphere. Snow is formed when a little drop of water freezes in a cloud. More water slowly freezes around the ice drop. This is why snowflakes have their shapes. (S4E3e)

Sleet is solid water that falls from the sky. Sleet is pellets of ice. Sleet is formed when a little drop of water freezes in a cloud. More water slowly freezes around the ice drop. The snowflake then gets lifted up into a warmer part of the cloud. The arms of the snowflake then melt. As this melting ice drop falls through the cold part of the cloud, the water from the arms then refreezes in a new ice layer around the original center, it turns into a larger drop of ice. (S4E3e)

Hail is solid water that falls from the sky as ice. Hail is made up of groups of little balls of ice. Hail forms during thunderstorms. Hail starts out as a small ball of ice. As it falls through the tall clouds, more water freezes to it. When it reaches the ground, hail can be as small as a pea or as large as a softball. (S4E3e)

Dew is liquid water that forms on objects outside in the morning or evening. Water vapor in the air condenses on the objects, like car windows and grass. Dew is a form of condensation. (S4E3e)

Fog is water vapor that hangs in the air near the surface of Earth. When the air gets cool enough, the water vapor in the air forms bigger droplets. These are the same kind of droplets that clouds have. This is why fog is considered a cloud that has settled on the ground. (S4E3e)

Meteorologists are scientists who study weather. Meteorologists use many different kinds of tools to help them observe the weather. (S4E4a)

A **thermometer** is a tool used to measure temperature. **Temperature** is a measure of the heat energy contained in an object. In other words, temperature is a measure of how hot or cold something is. A thermometer is used to tell the temperature inside or outside. (S4E4a)

A **rain gauge** is used to collect and measure the amount of rain that falls. Rain gauges are put outside. They are put in areas away from buildings and trees. (S4E4a)

A **wind vane** is also known as a **weather vane**. Wind vanes show the direction the wind is blowing. They are often put on the tops of barns and houses. (S4E4a)

An **anemometer** is a tool that measure how fast the wind is blowing. Some anemometers look like a wind vane. An anemometer has three or four cups connected to a shaft. The cups catch the wind and turn the shaft. You can count the number of times the shaft turns to find out the wind speed. (S4E4a)

When people talk about **weather**, they are talking about the conditions in the atmosphere at a specific time. Conditions that describe the weather include the temperature, humidity, and amount of wind. For example, the temperature in Georgia on January 5 was 41°F. This is an example of the weather of Georgia. (S4E4d)

When people talk about **climate**, they talk about the average of weather conditions in an area over a long time. To compare the two, think about the temperature. The average temperature in Georgia is about 39°F in January. This is an example of the climate of Georgia. (S4E4d)

A weather map shows the weather conditions in an area. There are **weather symbols** on the map. Snow is shown as a snowflake. Rain is shown as drops of water. Sunny weather is shown as a Sun. A weather map can show just one state, such as Georgia, or a larger area, such as the United States. (S4E4b)

Areas where two different air masses meet are called **weather fronts**. On a black-and-white weather map, warm fronts have filled-in half circle symbols placed at intervals on the side of the arc facing the direction the front is moving. Cold fronts have filled-in triangular "sawtooth" symbols at intervals on the side of the arc facing the direction the front is moving. Color weather maps may also show warm fronts as red and cold fronts as blue. Cold fronts often move into an area where a warm front was present. (S4E4b)

Humidity is the amount of water vapor that is in the air. When it is humid, rain, dew, or fog is more likely to occur. (S4E4b)

Meteorologists often talk about **high and low pressure** systems when they talk about weather. A low pressure system forms when warm and moist air rises, due to Earth's rotation and friction. This air is pushed toward the center of the system, leading to condensation and precipitation. In a high pressure system, air moves away from the center and the warm air is pushed down. This causes clouds to break up and makes for sunnier weather. (S4E4b)

A **barometer** is a tool that is used to show and measure the change in air pressure. If the air pressure stays the same, the weather will usually stay the same. When the air pressure goes up a lot or goes down a lot, the weather will change. (S4E4a, c)

Important Tip

✍ Clouds do not move on their own. Winds blow clouds around. Electrostatic charge builds up inside a cloud in the same way that it does when you rub a balloon on your head. Dust grains, water droplets, and ice particles rub against each other, creating an electrostatic charge inside the cloud. Because clouds are so big, they build up a lot of static electricity. Sometimes electric charges "jump" from cloud to cloud. These charges can also jump from the cloud to Earth. This is known as *lightning*. Lightning also creates a lot of heat. This heat causes the air around lightning to move very fast. This creates the sound we call thunder. When you hear thunder but don't see any lightning, it is because the lightning is high up in the clouds. (S4E4b, c)

Sample Items 5–8

Item 5

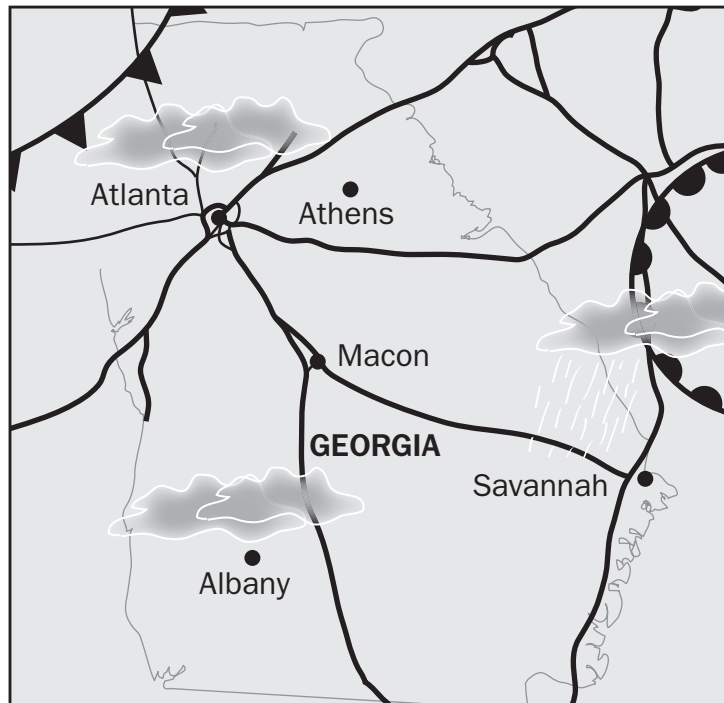
In the water cycle, clouds form when forces raise water vapor particles high into the air.

How do clouds form from rising water vapor?

- A. The water vapor particles speed up and evaporate into the air.
- B. The water vapor particles slow down and evaporate into the air.
- C. The water vapor particles lose heat and condense around particles of dust.
- D. The water vapor particles gain heat and condense around particles of dust.

Item 6

A class studied this weather map of Georgia.

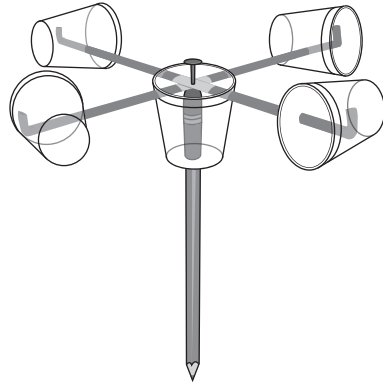


Based on the weather map, which of these BEST describes Atlanta's current weather?

- A. cold and rainy
- B. warm and rainy
- C. cold and cloudy
- D. warm and cloudy

Item 7

A student uses items found in the classroom to create the instrument shown, which measures a certain weather characteristic.



Which weather characteristic does this instrument measure?

- A. wind speed
- B. wind direction
- C. amount of rain
- D. atmospheric pressure

Item 8

A student measured the temperature and rainfall for one week in September. She recorded her data in a table.

Day of the Week	Highest Daily Temperature (°F/°C)	Amount of Rainfall (cm)
Sunday	88/31	0
Monday	86/30	0
Tuesday	86/30	0.889
Wednesday	85/29	1.27
Thursday	85/29	2.16
Friday	84/28	2.54
Saturday	??	?

If no new fronts are expected, what will Saturday's weather MOST LIKELY be like?

- A. warm and rainy
- B. cool and rainy
- C. warm and dry
- D. cool and dry

Unit 3: Forces and Motion

In this unit, you will study forces that push and pull objects and the resulting effect on their motion. You will learn what happens to the speed or direction of objects when forces are applied on them. You will study the effects of the force of gravity on different objects and how simple machines work.

KEY TERMS

A **force** is an action that either **pushes** or **pulls** on an object. Force can be the result of contact. You apply force to a book when you push it across a desk. Forces can also result when objects are not in contact with each other. Objects with more mass need more force to move them. Objects with less mass need less force to move them. (S4P3b)

Position is the place where an object is in relation to other things. The position where you are reading this might be a desk in the classroom. If you move to the library, your position may change to a chair in the library. (S4P3b)

An object that changes position over time has **motion**. An object that does not change position over time is at rest. People can describe the motion of an object. They can describe how the position changes. They can describe how fast the position changes. They can describe the **direction** the object moves when its position changes. (S4P3b)

Speed is a rate that describes the distance an object can or will move over a set amount of time. A car can move on a road at 50 miles per hour. At that speed the car will move 50 miles in one hour and 100 miles in two hours. Speed does not describe the direction an object moves. (S4P3b)

Gravity is a force that causes all objects around Earth to fall toward the ground. (S4P3d)

Simple machines are devices that change the direction or amount of force to do work. Simple machines do not do the work. They make the work easier to do. There are six simple machines. (S4P3a)

The **lever** is a simple machine made up of a straight beam and a fulcrum, a point that the rod pivots on. Levers change the amount of force required to move an object. A seesaw is an example of a lever. (S4P3a)

An **inclined plane** is a simple machine that uses a flat surface to help raise or lower a load. Inclined planes spread the amount of force required to lift a load over a distance. A wheelchair ramp is an example of an inclined plane. (S4P3a)

A **wedge** is a simple machine made up of one or two inclined planes. Wedges change the direction of force and are usually used to push two objects apart. A wedge can be driven into a log. When the downward force of a sledgehammer is applied, the wedge will change the direction of the force outward, causing the log to split. The cutting edges of knives, axes, and chisels are wedges, as are ice picks, pins, and needles. (S4P3a)

A **screw** is a simple machine that can be thought of as an inclined plane wrapped around an axle. Because of this, the force required to do something is spread out over a longer distance. (S4P3a)

The **wheel and axle** is a simple machine made up of a wheel and an attached axle. The wheel and axle transfers the force from the wheel to the axle. (S4P3a)

A **pulley** is a simple machine made up of a rope or a chain guided around a wheel or an axle. Pulleys change the direction of a force. In some situations when more than one pulley is used, it is also possible to change the amount of force required to move an object. (S4P3a)

Important Tips

- ✍ The more mass an object has, the more force will be needed to move it.
- ✍ The more speed an object has, the more force will be required to slow it, stop it, or change its direction.

Sample Items 9–12

Item 9

A woman needs to load a piece of furniture onto the back of her truck. She can choose one of the following to help her with the task: a lever, an inclined plane, a wedge, or a pulley.

Which of these is the **BEST** choice for decreasing the force needed to load the furniture?

- A. lever
- B. pulley
- C. wedge
- D. inclined plane

Item 10

A student stretches a rubber band between two push pins. He starts a toy car by pulling it back against the rubber band and letting it go. He records the distance the car travels. He does the same thing for cars in three other sizes. The rubber band pushes each car with the same force.

Toy Car	Distance Traveled (in meters)
Car 1	2
Car 2	2.5
Car 3	3
Car 4	1

Which toy car has the **GREATEST** mass?

- A. Car 1
- B. Car 2
- C. Car 3
- D. Car 4

Item 11

Three students are investigating force using a wagon. One student sits in the wagon, and another student moves the wagon by pulling it by the handle or pushing it from behind.

Which of these would cause the wagon to move faster?

- A. The wagon is pulled with less force.
- B. The third student sits in the wagon.
- C. The wagon is pushed with less force.
- D. The third student helps push the wagon.

Item 12

A student tosses a ball to another student. That student uses a bat to hit the ball high into the air. The ball drops back down, and the student catches it. The student rolls the ball across the sidewalk to the other student.

Which event is caused by gravitational force?

- A. A student tosses a ball to another student.
- B. The ball drops back down, and the student catches it.
- C. That student uses a bat to hit the ball high into the air.
- D. The student rolls the ball across the sidewalk to the other student.

Unit 4: Stars and Solar System

In this unit, you will study some of the characteristics of stars and planets. You will learn about star patterns in the night sky and our Solar System. Throughout the unit, you will explore how the relative positions of Earth, the Sun, and the Moon determine the phases of the Moon and explain the seasonal changes.

KEY TERMS

The **universe** is composed of all the galaxies: the solar systems, planets, and all the other objects that make them up. Everything from the smallest to the largest object is part of the universe. (S4E1)

Galaxies are groups of billions of billions of stars and solar systems. Our Solar System is located in the galaxy called the Milky Way. (S4E1)

An **orbit** is a path that one object takes around another object. Earth orbits the Sun. The Moon orbits Earth. (S4E1)

The **Solar System** is made up of the Sun and all the objects that orbit the Sun. The largest objects that orbit the Sun are planets. **Inner planets** are all composed of rock. They have a few to no moons. They do not have ring systems that orbit the planet. The inner planets of the Solar System are Mercury, Venus, Earth, and Mars. (S4E2d)

The **outer planets** are farther from the Sun. The outer planets are known as the gas giants. They are planets mostly made up of gases and liquids. The outer planets all have ring systems that orbit each planet. The outer planets of the Solar System are Jupiter, Saturn, Uranus, and Neptune. (S4E2d)

A **star** is a very large sphere of gases. Stars are so large that they are held together by their own gravity. Stars are the largest objects in any solar system. This is why stars are at the center of every solar system. Stars can be many different sizes. Earth orbits a star named the Sun. The Sun is small compared to many other stars. Our Sun is also described as yellow. Different stars are also described by the color they give off. The color of a star provides information about its temperature. Blue stars are the hottest stars. Red stars are the coolest stars. Yellow stars, such as the Sun, are in between hot and cool. (S4E1a)

A **constellation** is the pattern a group of stars makes as seen from Earth. The stars that form constellations are not connected by gravity. Constellations are often named after objects they look like. The Big Dipper is a constellation that looks like a ladle used to dip into liquids. (S4E1a, c)

Compared to stars, the **planets** are very small. If the Sun were the size of a basketball, the largest planet in our Solar System, Jupiter, would be the size of a table tennis ball. Earth would be the size of a small pea. (S4E1b)

The planets you can see without a telescope are Mercury, Venus, Mars, Jupiter, and Saturn. Those planets can be seen only during certain times. Mercury, Venus, and Mars are the planets closest to Earth. Jupiter and Saturn are the two largest planets in the Solar System. You need a telescope to see Uranus and Neptune because they are so far away. A **telescope** is a tool that magnifies an object so it looks closer. (S4E1d)

A **satellite** is an object that orbits a planet. Satellites can be objects made by humans, like the Hubble telescope. You can see some satellites at night as they orbit Earth. Satellites are also naturally made objects that orbit a planet, such as a moon. (S4E1d)

A **revolution** is the movement of a body around another in a closed path. Planets revolve around the Sun.



A **rotation** is the movement of a body around a central **axis**. A spinning top rotates around its axis. (S4E1, S4E2)

As Earth revolves around the Sun, it rotates on its axis. This rotation creates the **day and night cycle**. Earth rotates from west to east. This is why the Sun appears to rise in the east and set in the west. (S4E2a)

The Moon appears to change shape because of the **phases of the Moon**. The term “phases of the Moon” refers to how much of the Moon is lit and visible from Earth. During the new Moon phase, the Moon is between Earth and the Sun. This means that sunlight is lighting up the side of the Moon facing away from Earth. From our position on Earth, the Moon is not lit at all. This is known as a new Moon. Fourteen days later, the Moon has revolved around Earth. Earth is now between the Sun and the Moon. When light from the Sun lights up the side of the Moon facing Earth, we see a full Moon. Each day throughout the twenty-eight cycle, a little more or a little less of the Moon is lit. (S4E2b)

Earth rotates on its axis as it orbits the Sun. The **tilt of Earth’s axis** is toward or away from the Sun. Light from the Sun warms Earth. When the northern half of Earth receives more direct light from the Sun, it is tilted toward the Sun. At the same time, the southern half receives less direct light from the Sun. Because of this effect, when the northern half is experiencing summer, the southern half is experiencing winter. (S4E2c)

Important Tips

-  The relative order of each planet in the Solar System is easy to remember. People often remember the phrase “**My Very Eager Mother Just Served Us Nachos.**” The first letter of each word stands for the first letter of each planet. The words are also in order from the Sun and moving outward. **M** stands for **M**ercury, **V** stands for **V**enus, **E** stands for **E**arth, **M** stands for **M**ars, **J** stands for **J**upiter, **S** stands for **S**aturn, **U** stands for **U**ranus, and **N** stands for **N**eptune. (S4E2d)
-  The relative size of the planets in the Solar System is pretty easy to remember. There are four inner planets. Mercury is the planet closest to the Sun. Mars is the next biggest planet. Venus is the next biggest planet. Earth is a little larger than Venus. The relative size of the final four planets is easy to remember as well. The order of their sizes is the reverse of their relative order. The relative order of the outer planets is Jupiter, Saturn, Uranus, and Neptune. In order of size from smallest to largest, the outer planets are Neptune, Uranus, Saturn, and Jupiter. (S4E2d)

Sample Items 13–16

Item 13

A student observes stars in the night sky and sketches the portion of sky he can see between two trees in his backyard. Two hours later, he again sketches the portion of the sky he can see between the two trees. The sketches are different.

Which statement is the **BEST** possible explanation for this difference?

- A. Throughout the night, stars move in relation to one another.
- B. Stars and their arrangements move across the sky during the night.
- C. Stars are too far away to recognize any sort of pattern among them.
- D. Due to Earth's rotation, the pattern of stars between the trees changes.

Item 14

Which statement describing the relationship between planets and stars is true?

- A. Stars orbit some planets.
- B. Planets orbit the Sun and stars do not.
- C. Planets create light, and stars reflect light energy.
- D. The sizes of planets are directly related to the sizes of nearby stars.

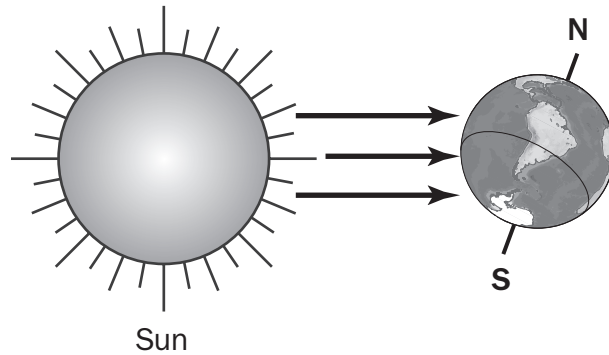
Item 15

Which of these causes the phases of the Moon?

- A. Earth's orbit around the Sun
- B. the Moon's orbit around Earth
- C. the orbit of the Sun as it orbits Earth
- D. the orbit of the Moon as it orbits the Sun

Item 16

The model shows Earth during part of its orbit around the Sun.



What is happening in the Southern Hemisphere?

- A. It is experiencing fall.
- B. It is experiencing spring.
- C. It is experiencing winter.
- D. It is experiencing summer.

Unit 5: Sound and Light

In this unit you will learn about light and sound. You will investigate how light propagates across different materials and how different types of lenses affect what you see and how you see different objects. You will also learn how sound is produced and what makes the pitch of a sound vary.

KEY TERMS

Light refers to the visible light we see. Light can be broken down into different colors. A **rainbow** shows the colors in white light. (S4P1)

When the human eye sees **colors**, it is seeing the parts of light that are reflected from an object. A blue object reflects the parts of light that we see as blue. The other colors are not reflected. (S4P1)

An acronym is a way to remember something. ROY G BIV is an acronym people use to remember colors in a rainbow. ROY G BIV stands for **Red Orange Yellow Green Blue Indigo Violet**. This is the spectrum of colors. A **spectrum** of light is the range of colors in the light. (S4P1)

If you look through a piece of glass and can see an object on the other side clearly, the glass is said to be **transparent**. Objects that are transparent let light move through them without scattering the light. Water is transparent. Hold a light up to a glass of water, and you will see most of the light move through. (S4P1a)

If you look through a piece of glass and the shape of the object on the other side is not easy to see, the glass is said to be **translucent**. Objects that are translucent let the light move through them, but they scatter the light out. Ice is translucent. Hold a light up to a piece of ice and the ice will glow with light, but not much of the light will move through the ice. (S4P1a)

If you look through something and you cannot see through it, the object is said to be **opaque**. Light cannot move through opaque objects. Hold a light up to a red brick and none of the light will move through it. The brick is opaque. (S4P1a)

Light can do different things as it encounters matter. **Reflection** occurs when light bounces off a medium. When light is reflected, not all the light is reflected. (S4P1b)

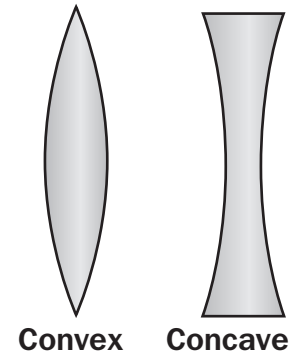
Refraction occurs when light moves through something. The light slows down and bends as it moves. Look at your hand through a glass of water. The shape of your hand will appear to change. The light that is reflected off your hand bends as it hits the water and causes your hand to look different. (S4P1c)

A **prism** is a clear object that refracts light as the light moves through it. As light moves through a prism, the different colors slow down at different speeds. This makes the colors separate from the light. The light comes out of the prism broken down into bands of color. This is the same phenomenon that causes rainbows. The drops of water act as little prisms that split the sunlight into the different colors. (S4P1c)

A **lens** is a piece of glass or other clear material with curved sides that concentrate or disperse light waves. A convex lens curves out from the middle.

A **convex** lens is thicker in the middle than at the top and bottom. Light that moves through a convex lens is directed toward the center of the lens. A convex lens focuses light. (S4P1c)

Concave means to curve inward. A **concave lens** is thinner in the middle than at the top and bottom. Light that moves through a concave lens is directed away from the center of the lens. A concave lens spreads light out. (S4P1c)




Sound waves are the waves that carry vibrations through gases, liquids, and solids. Someone shouting is an example of sound moving through a gas. When you knock on a door, the vibration your hand creates is heard on the other side of the door. Submarines use sound waves in the water to find things. (S4P2a)

Vibrations that we hear are called **sounds**. Stretch a rubber band with your fingers while someone plucks it. You can feel the vibration in your fingers. You can also hear the vibrations as sound. If you pull the rubber band tighter, the rubber band will vibrate faster. This will also make the pitch of the sound go higher. (S4P2a, b)

Pitch describes how high or low a sound is. The rumble of a train is a low pitch. Your shoes squeaking on the floor is a high pitch. (S4P2b)

Important Tip

 When sound is made, the type of matter it is made in affects the quality of the sound. Imagine dropping a basketball on a gym floor. The ball will bounce up, and the sound it makes is easy to hear. Now imagine dropping the ball on a carpeted floor. The ball will not bounce up as far, and the sound it makes will be harder to hear. Now imagine dropping the ball on sand. The ball will not bounce up at all, and it will make sound, but it will be so quiet that the sound will be very hard to hear. (S4P2a, b)

Sample Items 17–20

Item 17

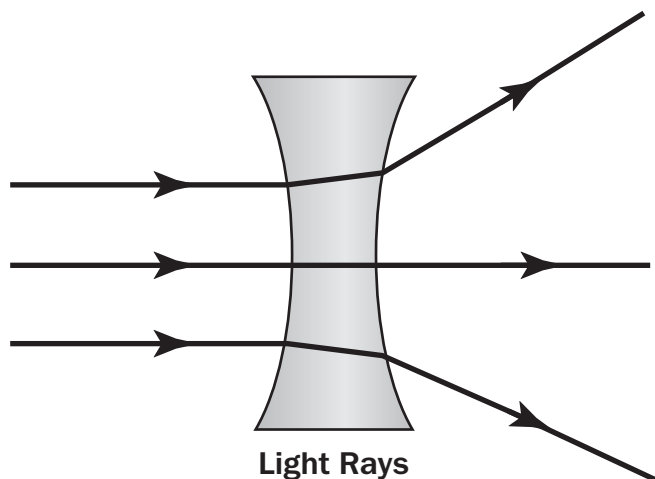
A student shines a flashlight at a mirror in front of her. She notices that a circle of light appears on the wall behind her.

Which statement **BEST** explains this observation?

- A. The mirror reflects the light.
- B. The mirror scatters the light.
- C. Light bounces over the mirror.
- D. Light passes through the mirror.

Item 18

The model shows how light travels through a piece of glass that has a certain shape.



Which of these **BEST** explains this type of lens and how it could be used in a flashlight?

- A. This is a prism that could be used to make a flashlight look dimmer.
- B. This is a convex lens that could be used to make a flashlight look brighter.
- C. This is a prism that could be used to make a flashlight show different colors.
- D. This is a concave lens that could be used to make a flashlight shine over a bigger space.

Item 19

A student stretches a rubber band across the top of an empty box.

What will happen if she plucks the rubber band?

- A.** It will vibrate and make a sound.
- B.** It will not move or make a sound.
- C.** It will vibrate without making a sound.
- D.** It will not move, but it will make a sound.

Item 20

A student observes that different lengths of pipe produce different pitches when he taps them. He notices that one pipe produces a lower pitch than the others.

Which statement BEST explains this observation?

- A.** The low-pitch pipe is longer than the other pipes.
- B.** The student tapped softest on the low-pitch pipe.
- C.** The student tapped hardest on the low-pitch pipe.
- D.** The low-pitch pipe is shorter than the other pipes.

SCIENCE ADDITIONAL SAMPLE ITEM KEYS

Item	Standard/ Element	Characteristics of Science	DOK Level	Correct Answer	Explanation
1	S4L1a	S4CS4a	2	A	The correct answer choice is (A) consumer. Consumers eat producers or other consumers. Choice (B) is incorrect because decomposers break down, or cause to decay, dead or decaying organisms. Choice (C) is incorrect because a predator is an animal that eats other animals. Deer eat plants. Choice (D) is incorrect because producers are organisms, like plants, that make their own food.
2	S4L1d	S4CS4a	3	D	The correct answer choice is (D) The bobcats would have less food because there would be fewer rabbits. When one organism in a food chain is removed, it affects all of the organisms in the food chain. There would be fewer rabbits because rabbits would have to find food someplace else or die. The bobcats would have less food because there would be fewer rabbits. Choice (A) is incorrect because rabbits are herbivores. They eat only plants. Bobcats eat only other animals. Choice (B) is incorrect because changes to the rabbit population will affect the bobcat population. Choice (C) is incorrect because bobcats are not a source of food for rabbits.
3	S4L2a	S4CS4a	2	C	The correct answer choice is (C) hard outer shell. The Eastern box turtle is able to hide from danger by retreating inside its hard shell. This protects it from predators. Choice (A) is incorrect because while the turtle does have tough, leathery skin, the outer shell is a better source of protection for the skin. Choice (B) is incorrect because having webbed toes would help the turtle swim better, but it would not be a defense against predators. Choice (D) is incorrect because the turtle's slow movement does not defend it against predators.

Item	Standard/ Element	Characteristics of Science	DOK Level	Correct Answer	Explanation
4	S4L2b	S4CS4a	2	B	The correct answer choice is (B) Farmers hunted the Tasmanian tiger to protect their livestock. Overhunting led to the extinction of these animals. Choice (A) is incorrect because the fact that the Tasmanian tiger was a marsupial does not explain why it might have become extinct. Choice (C) is incorrect because this sentence only describes the animal. It does not explain what led to its extinction. Choice (D) is incorrect because this sentence explains where the tiger lived. It does not tell why the tiger became extinct.
5	S4E3c	S4CS4c	2	C	The correct answer choice is (C) The water vapor particles lose heat and condense around particles of dust. As water vapor particles rise, they lose heat energy and cool. This causes them to move slower and condense around particles of dust in the air. Choice (A) is incorrect because water vapor particles slow down. They do not speed up or evaporate. Choice (B) is incorrect because the particles condense, not evaporate. Choice (D) is incorrect because the water vapor particles lose heat and get cooler. They do not gain heat.
6	S4E4b	S4CS4b	2	D	The correct answer choice is (D) warm and cloudy. The weather map shows clouds over Atlanta, and the cold front has not yet arrived. Choice (A) is incorrect because the map shows clouds over Atlanta, not rain. Choice (B) is incorrect because it is warm and rainy over Savannah, not Atlanta. Choice (C) is incorrect because the cold front has not yet reached Atlanta.

Item	Standard/ Element	Characteristics of Science	DOK Level	Correct Answer	Explanation
7	S4E4a	S4CS8c	2	A	The correct answer is choice (A) wind speed. The instrument shown is an anemometer. An anemometer is a tool that has “cups” that spin as the wind blows. The speed is found by counting the number of times the cups spin during a certain amount of time. Choice (B) is incorrect because a wind vane, not an anemometer, measures wind direction. Choice (C) is incorrect because a rain gauge, not an anemometer, measures rainfall. Choice (D) is incorrect because a barometer, not an anemometer, measures atmospheric pressure.
8	S4E4c	S4CS4c	3	A	The correct answer is choice (A) warm and rainy. The table shows that during the week the temperature has remained in the 80s/30s, which is warm. For most of the week, it has been rainy. It will most likely continue in this pattern because no new fronts are expected. Choices (B) and (D) are incorrect because it will most likely be warm. There is no evidence to suggest that the temperature will drop. Choice (C) is incorrect because it will most likely be rainy, not dry.
9	S4P3a	S4CS4a	2	D	The correct answer choice is (D) inclined plane. An inclined plane makes it easier to move heavy objects to higher levels. Less effort is needed to lift a load up a ramp. Choice (A) is incorrect because a lever increases force. Choice (B) is incorrect because a pulley changes the direction of the force used to lift something. Choice (C) is incorrect because a wedge is used to split things apart, not lift them. A wedge changes the direction of the force to a direction perpendicular to the original force.
10	S4P3b	S4CS4a	3	D	The correct answer is choice (D) Car 4. The force used to push the cars was the same, so the differences in the masses affected the distances they traveled. Car 4 traveled the shortest distance, so it had the most mass. Choices (A), (B), and (C) are incorrect because Car 1, Car 2, and Car 3 traveled farther than Car 4, so they had less mass.

Item	Standard/ Element	Characteristics of Science	DOK Level	Correct Answer	Explanation
11	S4P3c	S4CS8a	3	D	The correct answer is choice (D) The third student helps push the wagon. If more people push the wagon, they add a greater force than the initial force. This would cause the wagon to move faster. Choice (A) is incorrect because pulling the wagon less forcefully would not increase the wagon's speed. Choice (B) is incorrect because adding a passenger to the wagon would add mass to the wagon and slow it down. Choice (C) is incorrect because pushing the wagon less forcefully would not increase the wagon's speed.
12	S4P3d	S4CS4a	2	B	The correct answer is choice (B) The ball drops back down, and the student catches it. The ball falls after being hit high in the air because the gravitational force of Earth pulls the ball downward. Choices (A), (C), and (D) are incorrect because in each case the force applied by a student causes the ball to move.
13	S4E1a	S4CS8a	2	D	The correct answer is choice (D) Due to Earth's rotation, the pattern of stars between the trees changes. The student will see a different part of the night sky in his second observation because Earth's rotation will place him under a different part of the sky. Choice (A) is incorrect because the stars' locations in regard to one another are fixed. Choice (B) is incorrect because stars do not move across the sky; they only appear to because of Earth's rotation. Choice (C) is incorrect because it is possible to recognize patterns among the stars from where we are on Earth.
14	S4E1b	S4CS4a	2	B	The correct answer is choice (B) Planets orbit the Sun and stars do not. This statement is true. Choice (A) is incorrect because planets orbit stars, and stars do not orbit planets. Choice (C) is incorrect because stars create light, which planets reflect. Choice (D) is incorrect because the size of a planet is not related to the size of its star.

Item	Standard/ Element	Characteristics of Science	DOK Level	Correct Answer	Explanation
15	S4E2b	S4CS4a	2	B	The correct answer is choice (B) the Moon's orbit around Earth. As the Moon revolves around Earth, it reflects different amounts of light. This causes the Moon to look like it is changing shape. Choice (A) is incorrect because Earth's revolution around the Sun causes the change of seasons. Choice (C) is incorrect because the Sun does not orbit Earth. Choice (D) is incorrect because it is the Moon's orbit around Earth, not around the Sun, that causes phases.
16	S4E2c	S4CS4b	3	D	The correct answer is choice (D) It is experiencing summer. When the Northern Hemisphere tilts away from the Sun, it experiences winter. The Southern Hemisphere experiences the opposite because it is tilted toward the Sun. The heat energy from sunlight hits it more directly. Choices (A) and (B) are incorrect because the Southern Hemisphere is not in the correct position in relation to the Sun to be experiencing either of these seasons. Choice (C) is incorrect because the Northern Hemisphere, not the Southern Hemisphere, is experiencing winter.
17	S4P1b	S4CS8a	2	A	The correct answer is choice (A) The mirror reflects the light. When light hits a smooth surface, like a mirror, it bounces back to create a mirror image. Choice (B) is incorrect because light scatters when it hits a rough surface. Choice (C) is incorrect because light would reflect back from the mirror, not over it. Choice (D) is incorrect because light passes through transparent materials, not mirrors.
18	S4P1c	S4CS4a	2	D	The correct answer is choice (D) This is a concave lens that could be used to make a flashlight shine over a bigger space. Concave lenses are curved and cause light to diverge or bend out. They spread light, which lets you see a wider area of light. Choices (A) and (B) are incorrect because concave lenses don't affect the brightness of light. Choice (C) is incorrect because this statement describes a prism.

Item	Standard/ Element	Characteristics of Science	DOK Level	Correct Answer	Explanation
19	S4P2a	S4CS4a	2	A	The correct answer is choice (A) It will vibrate and make a sound. Sounds are created by vibrations. Choice (B) is incorrect because the force of plucking the rubber band will cause it to move or vibrate. Choice (C) is incorrect because if the rubber band vibrates, it will make a sound. Choice (D) is incorrect because a sound cannot be made without vibrations.
20	S4P2b	S4CS8a	3	A	The correct answer is choice (A) The low-pitch pipe is longer than the other pipes. Short pipes produce high pitches and long pipes produce low pitches. Choices (B) and (C) are incorrect because the force used to hit the pipe would change the volume of the sound created but not the pitch. Choice (D) is incorrect because a low-pitch pipe would not be shorter than the other pipes.

ACTIVITY

The following activity develops skills in Unit 1: Ecology.

Standards: S4L1a, S4L1b, S4L1c, S4L1d, S4CS1a, S4CS4a, S4CS4b, S4CS4c

Food Chains

Step 1: Create note cards and gather materials

Work individually or with family and friends.

- Create note cards with the names of five producers, ten consumers, and five decomposers found in a specific habitat in Georgia, such as a wetland or forest.
- Take the time to research five specific habitats and organisms found in Georgia, such as a wetland or forest.
- Draw a picture of the Sun on five other note cards.

Before beginning, make sure that the following materials are available:

- Note cards with the names of five producers
- Note cards with the names of ten consumers (five herbivores, five carnivores or omnivores)
- Note cards with the names of five decomposers
- Five note cards with the picture of the Sun
- Glue sticks
- Markers

Step 2: Create food chain diagrams

- Choose note cards with the names of one producer, two consumers, and one decomposer found in each of the five specific habitats in Georgia.
- Arrange the cards into five food chains, with one food chain for each habitat.
- Include the Sun as a part of each food chain.
- Use glue sticks, markers, and construction paper to create five food chain diagrams.

Questions to consider:

- *What pattern do all of your food chains follow?*
- *How can an organism be part of several food chains?*

Step 3: Create food webs

Next, explore how changes in the environment could affect an ecosystem of organisms. Study the food chains you created to make a food web.

- Find pictures or write on note cards to show the names of organisms found in Georgia. Put one organism on each note card.

For the second half of the activity, make sure that the following materials are available:

- Note cards with the names of organisms
- Cork board
- Push pins
- Safety scissors
- Yarn

Create a food web by pinning the organism cards onto the cork board. The yarn will be used instead of arrows to show the transfer of energy in the food web.

- Any organism that is consumed by another organism should be connected by a piece of yarn.
- Use the push pins to keep the yarn and organism cards in place.
- Once you completed the food webs, predict how a change to the plants would affect the other organisms. For example, you might say that removing the plants would not affect a top carnivore.
- Think of an event that kills off the plants in the ecosystem. Remove the push pins holding the plant note cards and yarn in place.

Questions to consider:

- *What might happen to an ecosystem if the plants of the food web were removed?*
- *What happened when you removed a plant from the food web?*
- *Was your prediction correct? Why or why not?*

ACTIVITY

The following activity develops skills in Earth Science, Unit 5: Stars and Solar System.

Standards: S4E2a, S4E2c, S4E2d, S4CS1a, S4CS4b, S4CS5a, S4CS5d

Use models to explain the causes of the seasons and day/night and explore Earth's place in the Solar System. Use a model of Earth to understand the causes of change of seasons.

Before beginning, make sure that the following materials are available:

- modeling clay
- toothpicks
- flashlight

Part One:

Take modeling clay, a toothpick, and a flashlight.

- Use a piece of clay to make a sphere. This model will represent Earth.
- Use another piece of clay to create a round, flat base for the sphere to sit on. Use the toothpick to draw a line all the way around the center of the sphere. This will represent Earth's equator.
- Push the toothpick through the top of the sphere to act as Earth's axis. Tilt the toothpick at about a 23° angle, with the tip pointing away from you. The tip pointing away represents the North Pole.
- Next, shine the flashlight at the model. The beam of the flashlight represents the rays of the Sun.

Draw a diagram showing how the light spreads over the sphere. Explain what seasons the Northern and Southern Hemispheres would be experiencing.

Repeat this activity with the toothpick, or the axis, pointing toward you. Explain how the beam of light spreads and tell which seasons would be experienced in the Northern and Southern Hemispheres.

Questions to consider:

- *What would happen if Earth's axis were not tilted?*
- *How would this change the seasons?*
- *What would an activity that could test this idea look like? Include instructions that others could follow to carry it out.*

Part Two:

Use your model of Earth to explore the causes of day and night.

- Shine the flashlight at the model of Earth while holding it by the top of the toothpick.
- Slowly spin the model in a counterclockwise direction. This spinning represents Earth's rotation from west to east.

Questions to consider:

- *What happens to the half of Earth that is facing away from the light?*
- *How is your model alike and different from the way the Sun lights Earth?*

Part Three:

Use objects to represent the Sun and planets in our Solar System.

- Research the relative size and order of the eight planets. Think about the positions of the planets in relation to the Sun.
- Gather clay, marbles, small round beads, and balls of different sizes (such as tennis balls, basketballs, golf balls, etc.).
- Create a model of our Solar System using these materials to represent the Sun and the planets.

Questions to consider:

- *How is your model like the Solar System?*
- *How is your model different from the Solar System?*

SOCIAL STUDIES

DESCRIPTION OF TEST FORMAT AND ORGANIZATION

The Grade 4 Social Studies EOG assessment has a total of 75 selected-response (multiple-choice) items.

The test will be given in two sections.

- You may have up to 70 minutes per section to complete Sections 1 and 2.
- You will have about 90 to 140 minutes for the complete Social Studies EOG assessment.

CONTENT

The Grade 4 Social Studies EOG assessment will measure the Grade 4 Social Studies standards that are described at www.georgiastandards.org.

The content of the assessment covers standards that are reported under these domains:

- History
- Geography
- Government and Civics
- Economics

ITEM TYPES

The Social Studies portion of the Grade 4 EOG assessment consists of selected-response (multiple-choice) items only.

SOCIAL STUDIES DEPTH OF KNOWLEDGE EXAMPLE ITEMS

Example items that represent applicable DOK levels are provided for you on the following pages. The items and explanations of what is expected of you to answer them will help you prepare for the test.

All example and sample items contained in this guide are the property of the Georgia Department of Education.

Example Item 1

DOK Level 1: This is a DOK level 1 item because it asks students to recall a fact.

Social Studies Grade 4 Content Domain: History

Standard: SS4H2. The student will describe European exploration in North America. a. Describe the reasons for, obstacles to, and accomplishments of the Spanish, French, and English explorations of John Cabot, Vasco Núñez de Balboa, Juan Ponce de León, Christopher Columbus, Henry Hudson, and Jacques Cartier.

Which person explored the coast of Canada for England?

- A. John Cabot
- B. Juan Ponce de León
- C. Christopher Columbus
- D. Vasco Núñez de Balboa

Correct Answer: A

Explanation of Correct Answer: The correct answer is choice (A) John Cabot. Choice (B) is incorrect because Juan Ponce de León sailed to Florida for Spain. Choice (C) is incorrect because Christopher Columbus sailed to North America for Spain. Choice (D) is incorrect because Vasco Núñez de Balboa was the first European to see the Pacific Ocean and claim parts of South America for Spain.

Example Item 2

DOK Level 2: This is a DOK level 2 item because it requires reasoning and application of knowledge to recognize a cause-and-effect relationship.

Social Studies Grade 4 Content Domain: History

Standard: SS4H6. The student will explain westward expansion of America between 1801 and 1861. b. SS4H6b. The student will explain westward expansion of America between 1801 and 1861.

How did the use of steamboats affect life in America?

- A. Goods could be shipped faster.
- B. Rivers were used less for trade.
- C. People moved away from river cities.
- D. Farmers' crops spoiled during shipment.

Correct Answer: A

Explanation of Correct Answer: The correct answer is (A) Goods could be shipped faster. Steamboats were able to navigate traveling up and down rivers. Travel from west to east became faster because the steamboat could travel up river, which was more difficult than going down river. Choice (B) is incorrect because the steamboat increased the use of rivers for trade. Choice (C) is incorrect because the population of river cities grew because of the steamboat. Choice (D) is incorrect because farmers' crops did not spoil during shipment because travel was faster.

Example Item 3

DOK Level 3: This is a DOK level 3 item because students are required to use more complex reasoning and apply a concept to new situations and evaluate which situation would meet the given criteria.

Social Studies Grade 4 Content Domain: Government/Civics

Standard: SS4CG3. The student will describe the functions of government. d. Explain limiting the power of people in authority.

Which of these is the BEST example of the power of government being limited by another branch of the government?

- A. Members of Congress respond to concerns of the citizens they represent.
- B. Members of Congress from different political parties serve on a committee.
- C. The president needs the approval of Congress to appoint a cabinet member.
- D. The president gives a speech to Congress about the condition of the country.

Correct Answer: C

Explanation of Correct Answer: The correct answer is (C) The president needs the approval of Congress to appoint a cabinet member. The U.S. Constitution created a government with a system of checks and balances to prevent any one person or group from gaining too much power. One of these checks is the requirement that the president obtain congressional approval of appointees such as judges and cabinet members. Choices (A), (B), and (D) are incorrect because they are all examples of how the power of government is limited, but they are not examples of one branch of government limiting the power of another branch of government.

SOCIAL STUDIES CONTENT DESCRIPTION AND ADDITIONAL SAMPLE ITEMS

In this section, you will find information about what to study in order to prepare for the Grade 4 Social Studies EOG assessment. This includes key terms and important vocabulary words. This section also contains practice questions, with an explanation of the correct answers, and activities that you can do with your classmates or family to prepare for the test.

The organization of Social Studies units in this guide is based on Frameworks developed by the Curriculum and Instruction Division of the Georgia Department of Education. The Social Studies section begins with Unit 2. Unit 1 focuses on over-arching themes and concepts, rather than specific standards. Unit 1 will, therefore, not be a part of the End-of-Grade assessment. These Frameworks can be accessed at <https://www.georgiastandards.org/Frameworks/Pages/BrowseFrameworks/socialstudiesK-5.aspx>.

All example and sample items contained in this guide are the property of the Georgia Department of Education.

CONTENT DESCRIPTION

The four domains (History, Geography, Government/Civics, and Economics) are fully integrated.

Some of the topics you will study in this guide are the following:

- The discovery of North America
- American Indian settlements
- The colonization of North America and colonial life
- How the new nation was formed
- The Declaration of Independence, the Bill of Rights, and the Constitution
- The American Revolution
- Territorial expansion
- The branches of government
- Personal budgets, personal spending and saving choices, decision making, opportunity costs, voluntary exchange and trade

Unit 2: The Discovery of North America

In this unit, you will learn about the explorers who came to North America. You will also study the American Indian settlements in North America. You will look at how major land features affect the environment. You will study the interactions between Native Americans and Europeans.

KEY TERMS—EXPLORERS

John Cabot: Italian explorer who led an English expedition in the 15th century. He and his crew were the first Europeans to explore the mainland of North America. (H2a)

Jacques Cartier: Explorer who discovered the St. Lawrence River in the 16th century. He later claimed Canada for France. (H2a)

Christopher Columbus: Italian explorer who discovered North America in the 15th century while searching for a westward route from Europe to India. (H2a)

Vasco Núñez de Balboa: A Spanish explorer. In the 16th century, he led the first European expedition to reach the Pacific Ocean. (H2a)

Henry Hudson: English explorer who discovered the Hudson River in the 17th century. (H2a)

Juan Ponce De León: Spanish explorer who discovered Florida in the 16th century. (H2a)

KEY IDEA

Cooperation and Conflict

At first, Native Americans welcomed the explorers from Europe. The two groups lived mostly in harmony, and Native Americans taught the newcomers about the land. As time passed, however, conflicts arose over ownership and control of natural resources. Europeans eventually conquered the Americas with their greater numbers and superior weapons. (H2b)

KEY TERMS—GEOGRAPHY

Atlantic Coastal Plain: The area along the North American coast between New England and Florida. It contains sandy beaches, swamps, and pine forests. (G1a)

Continental Divide: A mountain ridge in the Rocky Mountains. On the eastern side of the divide, all streams flow toward the Gulf of Mexico and the Atlantic Ocean. On the western side of the divide, all water flows toward the Pacific Ocean. (G1a)

Death Valley: The driest and hottest area in North America. It is located in southwestern Nevada and southeastern California. (G1a)

Great Basin: The desert region in the western United States. It is located in western Nevada and parts of Utah, California, Idaho, and Wyoming. (G1a)

Great Lakes: Five large bodies of fresh water on the northern border of the United States. They are called Lake Erie, Lake Huron, Lake Michigan, Lake Ontario, and Lake Superior. (G1a)

Great Plains: North American grasslands that stretch from Canada into Texas. Much of the area is used for farming and raising cattle. (G1a)

Gulf of Mexico: The part of the Atlantic Ocean that borders the southeastern United States. (G1a)

St. Lawrence River: Flows from Lake Ontario, past the state of New York, and into the Atlantic Ocean. (G1a)

KEY TERMS—NATIVE AMERICANS

Hopi: (southwest) Native American group who settled in present-day Arizona. They were farmers and grew blue corn and other crops. They built above-ground houses made from adobe. Each home had many rooms, and ladders were used to reach the upper units. (H1a, G2a)

Kwakiutl: (northwest) Native American group who settled mostly in present-day western Canada. They hunted and fished and created wooden masks and totem poles. They lived in large plank houses that would hold several families. (H1a, G2a)

Nez Perce: (plateau) Native American group who settled mostly in present-day Washington, Oregon, and Idaho. They were hunter-gatherers, and they lived in longhouses, and then teepees. They built canoes for fishing. (H1a, G2a)

Pawnee: (plains) Native American group who settled in the Great Plains. They were relocated to present-day Oklahoma during the late 1800s. They were hunter-farmers who lived in lodges made from dirt, grass, and branches. They were also known for their storytelling. (H1a, G2a)

Seminole: (southwest) Native American group who settled in present-day Georgia and Florida. They were relocated to Oklahoma during the 1800s. Some of the Seminoles were former slaves who chose to live with the Seminoles during and after the Civil War. They relied on farming and fishing. They lived in wood and plaster houses called chickees or in houses built on stilts in the Florida Everglades. (H1a, G2a)

Inuits: (arctic) Native American group who settled mostly in northwest Canada. They traveled and fished along the ocean and seashores. They built “igloo” homes out of ice and snow. They wore thick clothing made from caribou and seal hides. (H1a, G2a)

KEY IDEA

Native Americans and the Environment

Native American groups used their surroundings in many ways. Depending on their area, they grew crops in the summer and hunted in the winter. They used animal hides as clothing and made shelter from trees, leaves, and parts of animals. (H1b, G2b)

KEY TERMS—ECONOMICS

Opportunity cost: An economic term for what you must give up to obtain something else. It is always your second best alternative. (Ea1)

Choice: A selection from two or more alternatives. (Eb1)

Voluntary exchange: The act of buyers and sellers freely and willingly engaging in market transactions. (E1d)

Trade: The act of exchanging one thing for another. (E1d)

Sample Items 1–3

Item 1

How did the Seminole use the resources of their environment to meet their needs?

- A. They used the buffalo for food.
- B. They used seal skins for clothing.
- C. They used clay to make bricks for shelters.
- D. They used tree branches to make roofs for shelters.

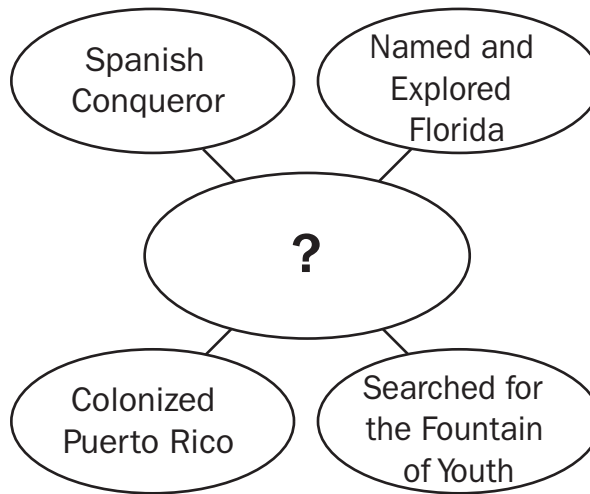
Item 2

Which obstacle did Vasco Núñez de Balboa overcome to become the first European to see the Pacific Ocean?

- A. dry lands
- B. rough seas
- C. thick jungles
- D. swampy rivers

Item 3

Look at the web diagram.



Which name **BEST** completes the web diagram?

- A. John Cabot
- B. Henry Hudson
- C. Juan Ponce de León
- D. Christopher Columbus

Unit 3: The Colonization of North America

In this unit, you will focus on the geography of the colonies. You will examine colonial life. You will be introduced to the economic principles of specialization and voluntary exchange.

KEY TERMS—COLONIAL GEOGRAPHY

New England Colonies: Connecticut, Rhode Island, Massachusetts, and New Hampshire were mostly rocky and not good for farming. However, there were many forests. This fed the growth of a shipbuilding industry. A successful fishing industry also took hold along the Atlantic Coast.

Mid-Atlantic Colonies: Delaware, New York, New Jersey, and Pennsylvania were hilly, with good farmland. Short, mild winters led to a long growing season. Corn, barley, and wheat were common crops. A large system of rivers made trade easy and encouraged manufacturing.

Southern Colonies: Maryland, Virginia, North Carolina, South Carolina, and Georgia had a hot, humid climate and flat, fertile soil. This made the area perfect for farming. Cotton and tobacco were the most common crops. (G2c, H3a, H3b)

KEY TERMS—ECONOMICS

Price incentive: A cost or benefit that motivates a decision or action by consumers, workers, and businesses in the economy. (E1b)

Specialization: When workers focus on performing separate tasks and as a result workers perform fewer tasks more frequently. Specialization leads to improved standards of living because the economy works more efficiently. (E1c)

Voluntary exchange: Act of buyers and sellers freely and willingly engaging in market transactions. (E1d)

Indentured servants: Indentured servants signed a contract agreeing to work for someone for a specified length of time. They were not free to leave their job before the time was up, thus giving up personal freedom. (H3b)

Opportunity cost: An economic term for what you must give up to obtain something else. It is always your second-best alternative. (Ea1)

Sample Items 4–6

Item 4

Which natural resource was **MOST** helpful to the Mid-Atlantic colonies for farming?

- A. coal
- B. animals
- C. fertile land
- D. thick forests

Item 5

Read the information in the box.

- feed chickens
 - milk cows
 - make soap
 - prepare fires
 - cook meals

Which person in the American colonies **MOST LIKELY** performed the activities listed in the box?

- A. an apprentice
- B. a woman
- C. an artisan
- D. a large landowner

Item 6

Colonists in the Mid-Atlantic colonies traded corn for fish from the New England colonies. What was the **MAIN** result of this type of trade?

- A. Each group was able to grow more crops.
- B. Each group received the goods it needed.
- C. Each group discovered new ocean resources.
- D. Each group began to produce the same goods.

Unit 4: Forming a New Nation

In this unit, you will examine the Declaration of Independence and the events that led to the American Revolution. You will study the Revolution and the key historical figures of this time period.

KEY TERMS

John Adams: A leader of the American Revolution. He later served as vice president under George Washington before becoming the second president of the United States. (H4d)

Benedict Arnold: A colonial general who betrayed the Continental Army during the American Revolution. His name has long been a synonym for “traitor.” (H4d)

Battle of Saratoga: This battle ended in victory for colonial forces. It is considered the turning point of the American Revolution because the win influenced France to support the American colonists. (H4c, G2d)

Battle of Yorktown: The final battle of the American Revolution. It ended with British general Cornwallis surrendering to American general George Washington. (H4c, G2d)

Battles of Lexington and Concord: The first battles of the the American Revolution. These battles took place in Massachusetts.

Boston Tea Party: A colonial protest against British taxes. Colonists dressed as Native Americans threw hundreds of pounds of tea from British ships into Boston Harbor. (H4a)

The Declaration of Independence: The document stating that the thirteen American colonies no longer recognized British rule. It was passed by the Second Continental Congress on July 4, 1776. (H4b)

Benjamin Franklin: During the American Revolution, he went to France to convince the French government to support American independence. He helped write the Declaration of Independence. (H4d)

French and Indian War: A war fought in North America between Britain and France. (Each side had Native American allies.) Britain won, taking over Canada from the French. Afterward, Britain taxed the American colonies to pay for the war. This upset many colonists and was a step toward the American Revolution. (H4a)

Patrick Henry: A leader of the American Revolution. He is remembered for his speeches against British rule of the colonies. (H4d)

Thomas Jefferson: A leader of the American Revolution. He wrote most of the Declaration of Independence. He later became the third president of the United States. (H4d)

King George III: The king of Great Britain at the time of the American Revolution. (H4d)

Natural Rights: Rights that can’t be taken away. Also called “unalienable rights.” Three of them are named in the Declaration of Independence: “Life, Liberty, and the Pursuit of Happiness.” (GC1a)

Tyranny: A government where all power belongs to one person. (H4a)

Representation: To have someone speak for you in government. Colonists wanted a representative in the British Parliament to speak on their behalf to the British king about the unfair tax practices. The Stamp Act is an example of the unfair taxes that the colonists protested against. (H4a)

“No Taxation Without Representation”: A colonial slogan that became popular in the 1750s. It protested the fact that Parliament taxed the colonies, but the colonies had no representatives in Parliament. (H4a)

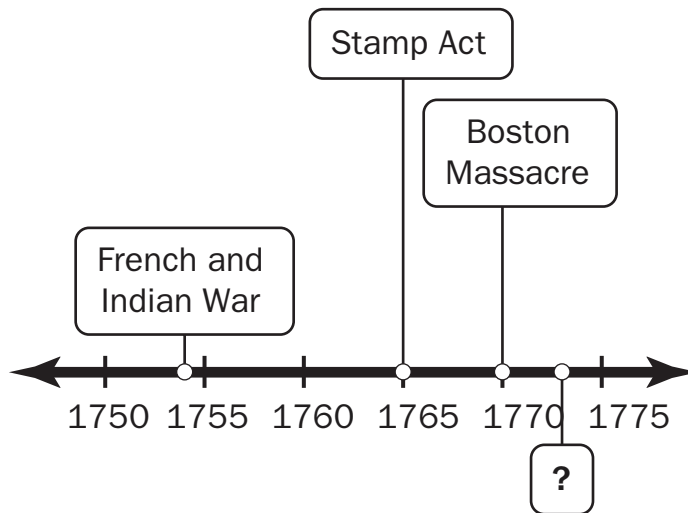
Sons of Liberty: An organization of colonists formed by Samuel Adams to protest the British Stamp Act. As they became more well known, some of their protests became violent. (H4a)

Stamp Act: A law passed by the British Parliament in 1765. It placed a tax on all printed material in the colonies. (H4a)

George Washington: Commander of the Continental Army during the American Revolution. He later became the first president of the United States. (H4d)

Sample Items 7–9**Item 7**

Look at the timeline.



Which event **BEST** completes the timeline?

- A. Boston Tea Party
- B. Paul Revere's Ride
- C. Declaration of Independence
- D. Battles of Lexington and Concord

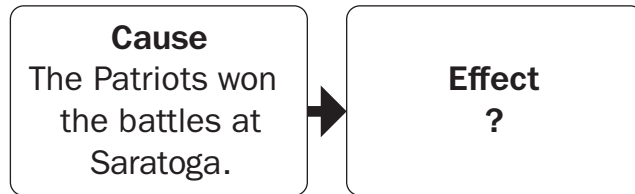
Item 8

The Declaration of Independence states that people have the right to life, liberty, and the pursuit of happiness. Which statement **BEST** describes the meaning of this right?

- A. People can choose which laws to follow.
- B. People are free and can make their own choices.
- C. People are promised that they will have a happy life.
- D. People can have their wants and needs met by the government.

Item 9

Look at the chart.



Which statement **BEST** completes the chart?

- A. George Washington captured many British soldiers.
- B. The British fought the colonists at Yorktown, Virginia.
- C. British soldiers endured a harsh winter at Valley Forge.
- D. The colonists proved to the French they could defeat the British.

Unit 5: Challenges of a New Nation

In this unit, you will study the Articles of Confederation, the Bill of Rights, and the Constitution. You will learn about the War of 1812. In economics, you will learn how trade promotes economic activity.

KEY TERMS

Benjamin Franklin: A Founding Father who helped write the United States Constitution. (H5b)

James Madison: He is often called the Father of the United States Constitution. He encouraged George Washington to lead the Constitutional Convention. (H5b)

Articles of Confederation: Americans created the new national government with this document. In this new government, the states remained independent. The national government was given authority to make treaties, create a military, and make currency. The new national government could not tax or regulate business. (H5a)

Constitutional Convention: The Articles of Confederation needed some changes in order to better govern the new nation. The Constitutional Convention was called together to make changes to the new government and to write the United States Constitution. Subjects debated were the rights of states, the Great Compromise, and slavery. (H5b)

Great Compromise: An agreement made at the Constitutional Convention, which created two houses of Congress. One house would have representation based on population; the other would have equal representation for each state. (H5b)

Bill of Rights: The first ten amendments to the United States Constitution. They are individual freedoms and rights. (H5d)

Checks and balances: Power that is given to each branch of the government over the others. Its purpose is to keep one branch of government from becoming too powerful. (CG3d)

Popular sovereignty: The idea that the government is created by and for the people. This is stressed in the United States Constitution, which begins with the words “We, the People” The people shape the United States government, unlike nations that are governed by one authority figure or a sovereign power. (CG1b)

Executive branch of the federal government: The branch that includes the president. It is responsible for managing the country and enforcing laws. It is also the branch that maintains military forces. (H5c, CG3a, b, c)

Legislative branch of the federal government: The branch that makes new laws and creates the federal government’s budget. It is also called Congress. It is divided into two parts. They are called the Senate and the House of Representatives.

Judicial branch of government: The branch that has the main responsibility of deciding if laws are constitutional. It is headed by the Supreme Court. (H5c, CG3a, b)

Federal government: The body of government that has authority over the entire country. It is divided into the executive, legislative, and judicial branches. (CG1c)

Ratify: The act of giving approval to something such as the Constitution of the United States. (H5d, CG1a,b,c)

The War of 1812: A war between the United States and Britain. It was sparked by British interference in American sea trade. During the war, the British invaded Washington, D.C., burning the White House and the Capitol. The treaty ending the conflict was signed in 1815, but the fighting did not stop until two weeks afterward.(H5e)

KEY IDEA

Weaknesses of the Articles of Confederation:

The Articles of Confederation was adopted by all thirteen states after the Revolutionary War. It was intended to be the governing document of the new United States. However, it did not give the federal government the power to:

- levy taxes
- organize an army or navy
- force states to obey federal laws
- organize a national court system

It also allowed states to issue their own money and to tax items from other states. Because of its weaknesses, it was obvious that the Articles needed to be replaced. In May of that year, delegates from all thirteen states met to draft the United States Constitution. The states ratified the United States Constitution and it replaced the Articles of Confederation. The United States Constitution remains in force today. (H5a)

Sample Items 10–12

Item 10

Which of these was a weakness of the Articles of Confederation?

- A. They allowed foreign rule.
- B. They depended on a large army.
- C. They required payment of heavy taxes.
- D. They lacked a strong central government.

Item 11

Who is considered the Father of the United States Constitution?

- A. James Madison
- B. Thomas Jefferson
- C. Benjamin Franklin
- D. George Washington

Item 12

Which document begins with the words “We, the People”?

- A. the Bill of Rights
- B. the Articles of Confederation
- C. the United States Constitution
- D. the Declaration of Independence

Unit 6: Expansion of a New Nation

In this unit, you will study the expansion of the nation. You will look at the impact of inventions like the steamboat, the locomotive, and the telegraph on the new nation. You will learn about some famous women in history—Harriet Tubman, Elizabeth Cady Stanton, and Sojourner Truth. You will learn about the Erie Canal, the Gold Rush, Lewis and Clark, the Louisiana Purchase, and the Oregon Trail.

KEY TERMS

The Alamo: A mission in Texas where the Mexican army defeated a group of American soldiers. It became a symbol for Texas independence. (H6a)

Boston: Located in Massachusetts, the city of Boston played a significant role in the American Revolution. (G1b)

Erie Canal: A man-made waterway that linked Lake Erie with the Hudson River. This increased trade and made New York a major port city. (G1b)

Gold Rush: In 1849, gold was discovered in California. Thousands of people moved there from the East within a very short time, hoping to become rich. (H6a)

Lewis and Clark Expedition: Meriwether Lewis and William Clark were assigned by President Thomas Jefferson to explore the Louisiana Territory. Their expedition lasted several years. (H6a, G2e)

Locomotive: The locomotive, a self-propelled vehicle, revolutionized the transportation of raw materials and finished goods over land. The creation of a railroad system in the United States marked a shift from an agricultural economy to one based on manufacturing. (H6b)

Louisiana Purchase: In 1803, President Thomas Jefferson bought the Louisiana Territory from France. That purchase doubled the size of the United States. (H6a)

New York City: Located in the state of New York, New York City was founded as a Dutch trading post. (G1b)

Oregon Trail: The route taken in the mid-1800s by settlers from Missouri to present-day Oregon. Parts of it branched off toward California and Utah. (H6a, G2e)

Philadelphia: City in Pennsylvania where the Declaration of Independence was signed on July 4, 1776. It was the largest city in the colonies. (G1b)

Steamboat: The steamboat provided a way to transport raw materials and finished goods through rivers, streams, and canals. This helped the growth of industrialization in the United States. (H6b)

Elizabeth Cady Stanton: An abolitionist who also campaigned for women's rights. (H7a)

Telegraph: The first instant way to communicate over long distances; early telegraph lines were often set along railroad tracks. From the 1830s to the 1860s, the telegraph helped the growth of industry and trade. (H6b)

Sojourner Truth: An African American abolitionist and campaigner for women’s rights. She was also active in recruiting African Americans for the Union Army during the Civil War. (H7b)

Harriet Tubman: An African American abolitionist. Born a slave, she helped slaves escape the South through the Underground Railroad. (H7a)

Underground Railroad: A system of way stations supported by a secret group of abolitionist determined to help enslaved persons in the South escape to freedom in the North. (H7a)

KEY IDEA

Westward Expansion

As the United States gained territory through events like the Louisiana Purchase and wars with Mexico, settlers began moving west. Settlers relocated to the frontier in order to claim free land from the government for ranching and farming, to strike it rich in the Gold Rush, or to avoid persecution. Improvements in transportation technology led to more people moving West. (H6a)

Westward expansion helped improve the economy of the United States. The country gained access to new natural resources and new ports that aided in trade. Westward expansion had negative effects too, especially for the Native Americans living in the newly gained territory of the United States. Many were forced to move, as new settlers claimed land that once belonged to them, and they lost their traditional way of life. (H6b, H6c)

Sample Items 13–15

Item 13

Which person was a conductor on the Underground Railroad who claimed “I never lost a single passenger”?

- A. Sojourner Truth
- B. Harriet Tubman
- C. Susan B. Anthony
- D. Elizabeth Cady Stanton

Item 14

Read the passage in the box. It is based on a journal entry written by Meriwether Lewis.

Thursday June 13, 1805

We ate venison and fish for breakfast. Traveling southwest, we climbed river hills to level land. Six miles of our travel was through rolling hills. I saw a beautiful plain covering 50 to 60 miles.

What goal of the Lewis and Clark expedition was accomplished in this entry?

- A. identify a route to the Pacific Ocean
- B. learn about the geography of the region
- C. learn about the people living in the region
- D. identify a route across the Rocky Mountains

Item 15

Which of these is an example of people overcoming a physical barrier?

- A. westward pioneers crossing the Rocky Mountains
- B. Native Americans building a settlement in a forest
- C. farmers experiencing a drought on the Great Plains
- D. Southern colonists building a settlement along a river

Unit 7: Our American Government

In this unit, you will learn about the three branches of the federal government. You will study the distribution of power and learn about laws and about protecting rights.

KEY TERMS

Branches of the federal government: The executive branch, the judicial branch, and the legislative branch. (H5c)

Checks and balances: The system for preventing any branch of government from becoming too powerful. Each branch of government has its own powers. Each branch also has some powers that can check, or overturn, certain decisions made by another branch. (CG3d)

Common good: Something that benefits society as a whole, not only an individual. (GC4a, b)

Executive branch of the federal government: The branch that includes the president. It is responsible for managing the country and enforcing laws. (H5c, CG3a, b, c)

Federal government: The national government as it is defined in the United States Constitution. (CG1c)

Freedom of expression: This term refers to the freedoms guaranteed by the First Amendment to the United States Constitution. The First Amendment protects freedom of religion, freedom of speech, freedom of the press, the right to peaceably assemble, and the right to petition the government. (GC2)

Judicial branch of the federal government: The branch that has the main responsibility of deciding whether new laws are constitutional. It is headed by the Supreme Court. (H5c, CG3a, b)

Legislative branch of the federal government: The branch that makes new laws and creates the federal government's budget. It is also called Congress. It is divided into two parts. They are called the Senate and the House of Representatives. (H5c, CG3e)

Separation of powers: The division of government into equally powerful branches. (H5c)

Sample Items 16–18

Item 16

Why does the United States Constitution include a system of checks and balances for the government?

- A. to encourage citizens to run for elected office
- B. to allow the legislative branch to pay for services
- C. to prevent one branch from becoming too powerful
- D. to provide a way for citizens to elect representatives

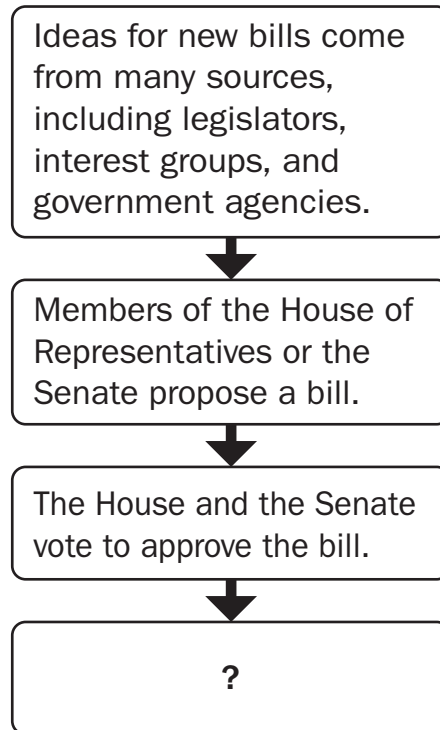
Item 17

Which of these does the First Amendment protect?

- A. the right to serve in any branch of the government
- B. the right to gather for peaceful purposes
- C. the right to enforce the law yourself
- D. the right to join the military

Item 18

Look at the flow chart.

How a Bill Becomes a Law

Which sentence **BEST** completes the chart?

- A. The citizens vote on the bill.
- B. The state governors vote on the bill.
- C. The leader of the judicial branch signs the bill into law.
- D. The leader of the executive branch signs the bill into law.

Unit 8: Being a Responsible Spender

In this unit, you will focus on economics and personal finance and budgets. You will learn about spending and saving.

KEY IDEAS

The Importance of Budgeting

A **budget** is a plan for your money. A good budget will help you plan a way for you to pay for things you need and things you want. It can also help you save money for the future.

There are two major parts to a budget. The first is **income**. Income is how much money you have to spend. Most people earn income by working.

The second part of a budget is a list of **expenses**. Expenses are things that income is spent on. Some expenses are **needs** (things you must have). Others are **wants** (things you would *like* to have). When you add your needs and wants together, the total shouldn't be more than your income.

A third thing to think about is **savings**. Savings is money that you put aside. That way, if something that you need or want comes along in the future, you have a way to pay for it.

Saving a little bit every chance you get is one of the smartest things you can do. Try it, and you will see how fast extra, or additional, money adds up! (E2)

Sample Items 19–21

Item 19

Which element should you include in your personal budget?

- A. the money you earn as an allowance
- B. the value of a game you receive as a gift
- C. the money your family spends on your food
- D. the value of a coupon you get for a free pizza

Item 20

Read the sentences in the box.

A man in England is thinking about becoming an indentured servant in the American colonies. He would receive passage on a ship to the colonies and then have to work for someone else for seven years.

Which of these would be an opportunity cost if the man decides to go to the colonies as an indentured servant?

- A. the skills he would learn on the job
- B. the personal freedom he would give up
- C. the adventures he would have in a new land
- D. the dangers he would face crossing the ocean

Item 21

Why is making a personal budget important?

- A. It helps you identify things you want.
- B. It shows you how to earn more income.
- C. It shows you where to keep your money.
- D. It helps you decide how to spend money.

SOCIAL STUDIES ADDITIONAL SAMPLE ITEM KEYS

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
1	SS4H1b	2	D	The correct answer is choice (D) They used tree branches to make roofs for shelters. The Seminole built chickees in the Everglades. The roof was made from palmetto branches. Choices (A), (B), and (C) are incorrect because they refer to Native American groups from different regions. The Pawnee used the buffalo for food, the Inuit used seal skin for clothing, and the Hopi made shelters from clay bricks.
2	SS4H2a	2	C	The correct answer is choice (C) thick jungles. Vasco Núñez de Balboa hacked his way through the thick jungles of Panama to be the first European to see the Pacific Ocean. Choice (A) is incorrect because Balboa was living in Panama, where the land is not arid. Choice (B) is incorrect because Balboa's journey was across land, not the sea. Choice (D) is incorrect because rivers are not necessarily swampy.
3	SS4H2a	2	C	The correct answer is choice (C) Juan Ponce de León. De León, a Spanish explorer, meets all four clues. The explorers named in choices (A), (B), and (D) have different accomplishments.
4	SS4G2c	2	C	The correct answer is choice (C) fertile land. The fertile land of the Mid-Atlantic colonies made it ideal for farming. Choice (A) is incorrect because the abundance of coal does not make an area good for farming. Choice (B) is incorrect because animals are not the most important resource for farming. Choice (D) is incorrect because forested land is not suitable for farming.
5	SS4H3b	2	B	The correct answer is choice (B) a woman. The activities in the list were mainly done by women in colonial times. Choices (A), (C), and (D) are incorrect because apprentices, artisans, and large landowners had different daily activities in the colonies.
6	SS4E1d	2	B	The correct answer is choice (B) Each group received the goods it needed. The New England colonies were able to get the food crops they needed, and the Mid-Atlantic colonies were able to get the ocean resources they needed. Choices (A), (C), and (D) are incorrect because these are not the main results of the type of trade described.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
7	SS4H4a	2	A	The correct answer is choice (A) Boston Tea Party. The Boston Tea Party occurred during the progression of events that led to the American Revolution. Choices (B), (C), and (D) are incorrect because they happened after 1774.
8	SS4CG1a	2	B	The correct answer is choice (B) People are free and can make their own choices. The Founding Fathers' intent behind the right to life, liberty, and the pursuit of happiness was to secure people's liberty from government infringement and to allow them personal freedoms. Choice (A) is incorrect because this right does not include choosing which laws to follow. Choice (C) is incorrect because you have the right to pursue happiness, but the law can't guarantee you will be happy. Choice (D) is incorrect because the government cannot meet all your wants and needs.
9	SS4H4c	2	D	The correct answer is choice (D) The colonists proved to the French that they could defeat the British. The victories at Saratoga turned the course of the war as the Patriots proved they could beat the British and enlisted the support of the French. Choices (A), (B), and (C) are incorrect because they do not identify effects of the battles at Saratoga.
10	SS4H5a	2	D	The correct answer is choice (D) They lacked a strong central government. The Articles of Confederation created a weak central government. Choice (A) is incorrect because foreign rule was not allowed. Choices (B) and (C) are incorrect because Congress could not maintain an army or force payment of taxes.
11	SS4H5b	1	A	The correct answer is choice (A) James Madison. James Madison had spent time studying governments. He came to the Constitutional Convention more prepared than the others to write a new constitution. Choice (B) is incorrect because Thomas Jefferson is known for writing the Declaration of Independence. Choice (C) is incorrect because Benjamin Franklin worked to help the delegates compromise and work together during the Constitutional Convention. Choice (D) is incorrect because George Washington is considered the Father of the United States.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
12	SS4CG1b	1	C	The correct answer is choice (C) the United States Constitution. The Preamble to the U.S. Constitution begins with the words “We, the People.” Choices (A), (B), and (D) are incorrect because although they are important documents in America’s history, they do not begin with the words “We, the People.”
13	SS4H7a	1	B	The correct answer is choice (B) Harriet Tubman. Harriet Tubman was a conductor on the Underground Railroad and helped many slaves escape to the North. Choice (A) is incorrect because Sojourner Truth was an abolitionist and women’s rights activist. She was not a conductor on the Underground Railroad. Choices (C) and (D) are incorrect because Susan B. Anthony and Elizabeth Cady Stanton are known for their work to advance women’s rights.
14	SS4H6a	3	B	The correct answer is choice (B) learn about the geography of the region. In the excerpt, Lewis describes the land, including hills and plains. Choice (A) is incorrect because it does not reflect information in the excerpt. Choice (C) is a goal of the expedition, but it is incorrect because the journal entry does not include information about people. Choice (D) is incorrect because it does not describe a goal of the expedition.
15	SS4G2e	2	A	The correct answer is choice (A) westward pioneers crossing the Rocky Mountains. The Rocky Mountains were very difficult to cross, especially during winter, and they were considered a physical barrier to westward movement. Choices (B) and (D) are incorrect because although they mention physical features (forests and rivers), these are not considered physical barriers. Choice (C) is incorrect because although experiencing drought is an obstacle to farming, it is not considered a physical barrier.
16	SS4H5c	2	C	The correct answer is choice (C) to prevent one branch from becoming too powerful. As outlined in the Constitution, each branch has checks over the other two branches. Choices (A), (B), and (D) are incorrect because they are not accurate reasons for the creation of the system of checks and balances.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
17	SS4CG2	3	B	The correct answer is choice (B) the right to gather for peaceful purposes. The First Amendment includes our right to peacefully protest. Choice (A) is incorrect because serving in the government is not a right. It would be based on elections or appointments. Choice (C) is incorrect because citizens cannot enforce the law. Choice (D) is not correct because serving in the military is not a right.
18	SS4CG3a	2	D	The correct answer is choice (D) The leader of the executive branch signs the bill into law. The president, as the leader of the executive branch, can veto a bill or sign it into law. Choices (A), (B), and (C) are incorrect because they are not steps in how a national law is made.
19	SS4E2	1	A	The correct answer is choice (A) the money you earn as an allowance. A personal budget includes income and expenses. An allowance is considered income. Choice (B) is incorrect because nonmonetary gifts are not considered income. Choice (C) is incorrect because it is not personal income. Choice (D) is incorrect because a coupon is not considered income.
20	SS4E1a	3	B	The correct answer is choice (B) the personal freedom he would give up. Indentured servants signed a contract agreeing to work for someone for a specified length of time. They were not free to leave their job before the time was up, thus giving up personal freedom. Choices (A), (C), and (D) are incorrect because although they describe experiences the man might have, they do not describe opportunity costs.
21	SS4E2	2	D	The correct answer is choice (D) It helps you decide how to spend money. Budgets allow you to see how much money you have as income and expenses, thus enabling you to make decisions on how to spend your money. Choices (A), (B), and (C) are incorrect because a budget does not necessarily identify things you want, help you earn income, or show you where to keep money.

ACTIVITY

The following activity develops skills in Unit 3: The Colonization of North America.

Standards: SS4H3a, SS4H3b, SS4G2c, SS4E1b, SS4E1c, SS4E1d

Draw three pictures showing colonists living in different regions of North America. Each picture should show a different part of colonial life. For each picture, provide a written description explaining the role of the person shown in the picture, what colony the person would have lived in, and why the activity shown was an important part of colonial life.

- Select a colony to represent.
- Each picture should show someone in a specific role in the colonies, such as that of a large landowner, a farmer, an artisan, an apprentice, a woman, or a child.
- Conduct research in order to accurately portray different aspects of colonial life specific to the selected colony.

Include information about the impact of:

- geography on economic activity, homes, clothing, and food
- the economy on daily life

Share your completed pictures with a family member or friend.

ACTIVITY

The following activity develops skills in Unit 6: Expansion of a New Nation.

Standards: SS4G1b, SS4G2e, SSH6a, SSH6b

Work with a family member or friend to create a product that illustrates how physical barriers—both natural and man-made—affected territorial expansion. You can choose to complete either Part 1 or Part 2 of the activity.

Part 1:

- Create an interactive map illustrating Lewis and Clark’s expedition, the route of the Oregon Trail, or the development of mining towns during the California Gold Rush.
- On a map, indicate where barriers existed and how this changed or affected travel.
- Create note cards or a presentation to go with the map, or add callouts to the map.
- Share your note cards or give your presentation to a family member or friend.

Part 2:

- Create a board game showing the beginning and ending points of Lewis and Clark’s expedition, the Oregon Trail, or the development of mining towns during the California Gold Rush.
- The objective of the game is to get players from the starting point to the finish.
- Along the way, illustrate barriers and features of the expeditions.
- Model your game after traditional board games with cards telling players what to do or sending players to specific sites on the board. Game cards can include information you have learned or researched.

Play your game with family members or friends.

APPENDIX A: LANGUAGE PROGRESSIVE SKILLS, BY GRADE

The following skills, marked with an asterisk (*) in Language standards 1–3, are particularly likely to require continued attention in higher grades as they are applied to increasingly sophisticated writing and speaking.

Standard	Grade(s)							
	3	4	5	6	7	8	9–10	11–12
L.3.1f. Ensure subject-verb and pronoun-antecedent agreement.								
L.3.3a. Choose words and phrases for effect.								
L.4.1f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.								
L.4.1g. Correctly use frequently confused words (e.g., <i>to/too/two; there/their</i>).								
L.4.3a. Choose words and phrases to convey ideas precisely.*								
L.4.3b. Choose punctuation for effect.								
L.5.1d. Recognize and correct inappropriate shifts in verb tense.								
L.5.2a. Use punctuation to separate items in a series.†								
L.6.1c. Recognize and correct inappropriate shifts in pronoun number and person.								
L.6.1d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).								
L.6.1e. Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.								
L.6.2a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.								
L.6.3a. Vary sentence patterns for meaning, reader/listener interest, and style.*								
L.6.3b. Maintain consistency in style and tone.								
L.7.1c. Places phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.								
L.7.3a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.								
L.8.1d. Recognize and correct inappropriate shifts in verb voice and mood.								
L.9-10.1a. Use parallel structure.								

* Subsumed by L.7.3a

† Subsumed by L.9-10.1a

‡ Subsumed by L.11-12.3a

APPENDIX B: CONDITION CODES

The student response is flawed for various reasons and will receive a condition code. Students who receive a condition code have a score of zero (0).

- For the extended writing tasks, both traits receive a score of 0. For Trait 1: Ideas 0 out of 4 possible points and for Trait 2: Language Usage 0 out of 3 points. (Or 0 points out of a possible 7 points.)
- For the narrative item, the score is 0 out of a possible 4 points.

CODE	Performance Scoring: Code Description	Full Description
A	Blank	<ul style="list-style-type: none"> • Blank • Student's response did not contain words. • In some instances, student may have drawn pictures.
B	Copied	<ul style="list-style-type: none"> • Student's response is not his/her own work. • Student does not clearly attribute words to the text(s). • Student copies from the text(s) that serve as writing stimulus.
C	Too Limited to Score/Illegible/ Incomprehensible	<ul style="list-style-type: none"> • Student's response is not long enough to evaluate his/her ability to write to genre or his/her command of language conventions. • Response is not able to be deciphered. • An illegible response does not contain enough recognizable words to provide a score. • An incomprehensible paper contains few recognizable English words or it may contain recognizable English words arranged in such a way that no meaning is conveyed.
D	Non-English/ Foreign Language	<ul style="list-style-type: none"> • Written in some language other than English. • The writing items/tasks on the test require the student to write in English.
E	Off Topic/Off Task/ Offensive	<ul style="list-style-type: none"> • Student may have written something that is totally off topic (e.g., major portion of response is unrelated to the assigned task). • Student response did not follow the directions of the assigned task (i.e., off task). • Student uses inappropriate or offensive language/picture.

Study/Resource Guide
for Students and Parents
Grade 4
End-of-Grade

